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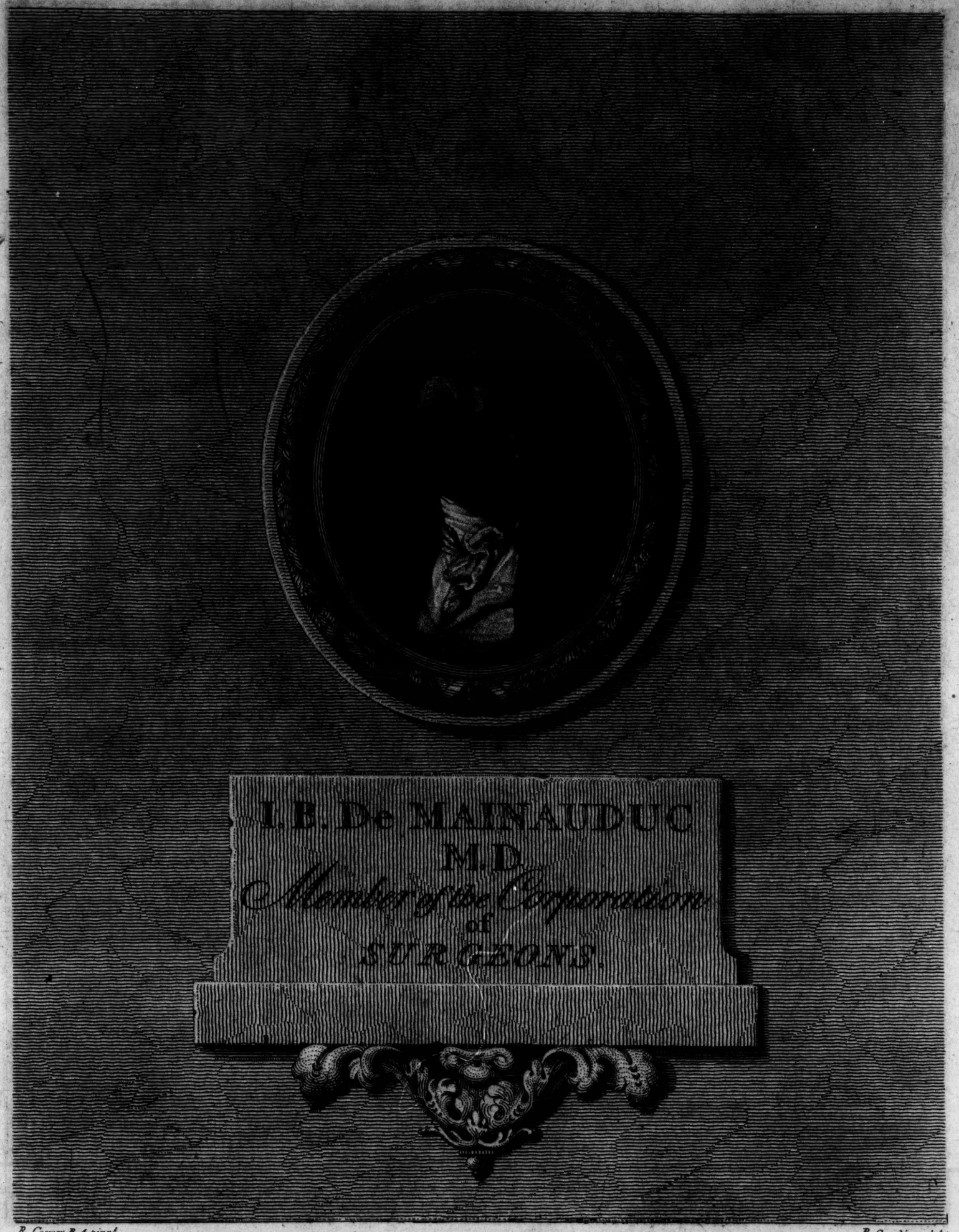
LECTURES

OF

J. B. de MAINAUDUC, *M.D.*

BRITISH MUSEUM
AUG
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THE

LECTURES

OF

J. B. de MAINAUDUC, *M. D.*

MEMBER OF THE CORPORATION OF SURGEONS

IN LONDON.

PART THE FIRST.

London:

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INTRODUCTION.

A SUBJECT ſo new, and which has excited ſo much the attention of the Public, may render a ſhort account of the Man firſt attempting its Introduction to the world not unintereſting.

Doctor JOHN BONIOT de MAINAUDUC was deſcended from a noble French family: his anceſtors were driven from their native country for embracing the Proteſtant faith. They ſettled in Ireland. Our Lecturer was born in Cork. Of his medical life, the following account, which he felt himſelf called upon to give to his Students, in 1795, is in his own words.

" Though written at a moment when my numerous avoca-
" tions render ſuch a taſk truly inconvenient, this will, I hope,
" apologize for ſuch inaccuracies as want of time may not
" perhaps permit me to correct, and will be ſufficient for the
" candid; but to thoſe who are not of that deſcription, I freely
" make the bow of indifference, being, in every ſenſe of the
" word, a Noun Subſtantive.

" A claſſical education prepared me to receive Anatomical
" Inſtructions from the late Doctor William Hunter, of Wind-
" mill Street.

" In 1769, I became a pupil in St. George's Hoſpital, and " a Dreſſer in rotation, under Mr. Bromfield, Mr. Gunning, " Mr. Hawkins, and Mr. John Hunter.

" In 1770, I became pupil to the late Doctor John Leake, of " Craven Street, Strand; and attended the practice of Midwifery " under him, at the Weſtminſter Lying-in Hoſpital.

" I then became pupil to Doctor George Fordyce, of Eſſex " Street, Strand, for the practice of Phyſic, Materia Medica, " and Chymiſtry.

" In 1775, I opened an Apothecary's ſhop, in partnerſhip with " Mr. I. Nicholas, in Clare Street, Clare Market, and afterwards " took Mr. Mills into that part of the buſineſs which Mr. Nicholas " reſigned.

" In 1777, I preſented myſelf at Surgeons' Hall for examina- " tion, and was received and ſworn a Member of that Corporation " for London practice.

" Having now fulfilled my plan of acquiring a ſufficient know- " ledge of Pharmacy, I reſigned the buſineſs in Clare Street to " Mr. Mills, and purſued the practice of Surgery and Midwifery " in Leigh Street, Red Lion Square, and in Bridges Street, " Covent Garden.

" In 1778, I removed to Cecil Street, in the Strand, and be- " came a Teacher of Anatomy and Midwifery.

" In 1779, I became phyſician's pupil at St. Thomas's Hoſpital, " under Dr. George Fordyce, Dr. H. R. Reynolds, and Dr. I. " Watkinſon.

" I now conſulted Dr. George Fordyce on the mode of obtain- " ing a diploma in phyſic, who informed me, that no Member " of the Corporation of Surgeons could, by their bye-laws, " become a Fellow of the College of Phyſicians in London, with- " out being diſfranchiſed from that Society; as ſuch he adviſed " me, rather than relinquiſh the Surgeons' Company, to make " application to the College of Aberdeen. I followed Dr. For- " dyce's opinion: my Certificate was ſigned by him and Dr. John " Leake; and I received a Diploma.

" In 1782, I gave up my practice in London, and went to " Paris; and in 1783, received letters from Dr. Fordyce, * and

* DEAR DOCTOR,

It would give me great pleaſure to be of any uſe to you, or to teſtify your great abilities in any way in my power; but I have not the honor of being known in the leaſt to the Duke of Mancheſter, and therefore cannot think of intruding upon him by a letter. Believe me, it will give me great pleaſure to hear of your ſucceſs any where; and that I remain

Your moſt Obedient

ESSEX STREET,
JULY 16, 1783.

Humble Servant,

G. FORDYCE.

" Mr. John Hunter, * bearing teſtimony of my abilities. His " Grace the Duke of Mancheſter, then the Engliſh ambaſſador, " politely undertook my introduction to the Court of Verſailles, " to receive the appointment of Quarterly Phyſician to the King " of France.

" To qualify myſelf for that appointment, it was neceſſary to " become a Member of a French College; and, in 1784, I pre- " ſented myſelf at the College of Rheims; where, after the re- " gular examinations, I received another diploma in phyſic. An " exorbitant demand made by the French Phyſician, whoſe " place I was to fill, determined me to relinquiſh the project; " and in 1785, I returned to London. Since that time it has

* SIR,

If any thing from me can add to your reputation, you are extremely welcome to it; and indeed you have in ſome degree a right to call upon me, from having received part of your education under me at St. George's Hoſpital; and from your other purſuits in queſt of knowledge, I have every reaſon to believe that your qualifications in the phyſical line are unexceptionable. I have not the honor of being perſonally known ſo the Duke of Mancheſter, therefore cannot with any degree of propriety write to his Grace. I wiſh you ſucceſs, and am,

Dear Sir,

Your moſt Obedient,

And moſt humble Servant,

JOHN HUNTER.

LONDON,
JULY 14, 1783.

" fallen to my lot to make ſuch diſcoveries in Anatomy, in " Diſeaſes, and in their Mode of Cure, as well as in Midwifery " and the Animal Œconomy, as were moſt anxiouſly wiſhed " for, but little expected to take place within the limits of the " preſent century."

And here it may not be improper to introduce an Addreſs read by Doctor De Mainauduc, in April 1786, at his houſe in Bloomſbury Square, to a moſt reſpectable aſſembly, met to ſee and examine the effects produced by his new and important Diſcovery. He begins,

" There are perhaps few undertakings more ungrateful than " that of forcing conviction, however beneficial the ſubject to " Mankind: That which honors me with your preſence, ſo widely " differs from all medical and philoſophical reaſoning, that the " world in general are apprehenſive of crediting even the evi- " dence of their own ſenſes: conſequently, thoſe who ſhould " appear foremoſt in the cultivation of a Science of ſuch infinite " conſequence, and to whom, and to whoſe opinion the world " naturally looks up, withhold even their attention, until ſome " more hardy and leſs tenacious of perhaps their vanity, pave " the way for their appearance. Is this well judged! Is there " no improvement beyond our muſty folios and trite ſchool apho- " riſms! Is the healing art ſo perfect as to need no aſſiſtance! " Are we never miſtaken in diſeaſes, nor unfortunate in our " mode of cure! Is it not poſſible, that to torture the animal, " vegetable, and mineral kingdoms, in queſt of new drugs, the " greateſt genius may have quitted the eaſy, ſimple path of

" Nature, and loſt himſelf in the well-meant purſuit! And, ſhould " this appear to be the caſe, who has the greateſt merit; the " man who, open to conviction, quits his error; or the obſti- " nately blind, who dreads to perceive what may wound his " pride? Such conduct can not eſcape reprobation; unleſs, " indeed, perſeverance can convert error into truth.

" This pregnant age produces daily diſcoveries; thoſe diſco- " veries either are, or are not, fallacious: and how is the world " to judge them, but through the tribunal of the ſcientific and " candid? Should not then each diſcovery undergo an impar- " tial examination, and ſtand or fall by that teſt; and ſhould not " the man who holds it out be applied to for that purpoſe?

" This is my caſe: the ſubject I offer, either is, or is not a " deception; and either muſt, or muſt not be beneficial to man- " kind. If an impoſition, it ſhould be detected, and the world " undeceived; if not, it ſhould be cheriſhed and improved; if " detrimental to the community, that community ſhould be " guarded againſt its influence; if beneficial to mankind, who " can be ſo far their enemy as to withhold it from them? " But whom ſhall we appoint to judge? None, ſurely, can be " adequate to that taſk, who will not follow, learn, and ſtrictly " examine it.

" This Science, ſo far from being entirely a modern diſcovery, " was practiſed two hundred and fifty years ago by Phyſicians " of note and merit; but being enveloped with ridiculous noſ- " trums or machinery, it dwindled into oblivion. By three years

" Attention, Practice, and exceſſive Expence, having diſcovered
" that all machinery is unneceſſary, and that the power is wiſely
" given, for great and good purpoſes, to every individual by
" the Almighty Ruler; I think it my duty to preſent it to my
" Country, and am daily requeſting the Faculty, the Public, and
" the Benevolent, to accept it from me, for the general good
" of Mankind.

" For this purpoſe, I have deigned to lay aſide, for a moment,
" the dignity of the Phyſician, and throw open my doors for the
" reception of the Curious, and examination of the Incredulous.
" And here, in the preſence of Almighty God, I do moſt ſolemnly
" aſſert, that there is not the moſt diſtant ſhadow of Deception,
" Preparation, or Combination, uſed by me, by the Patients, or
" by any other perſon whatſoever connected in it with me; for
" the further confirmation of this, I have called together ſome
" of my patients, and ſhall eſteem myſelf obliged by thoſe who
" will take their addreſſes, and minutely enquire into the ſubject.

" Every man is, I believe, more or leſs affected; but it is
" unfortunate for the incredulous, that marked Effects, or Criſes,
" are in general produced only in the diſeaſed and delicate, and
" not always even in them; as ſeveral have been cured without
" Criſes.

" Rheumatic, nervous, and ſeveral other chronic diſeaſes, have
" been cured by this Science, which had withſtood our regular
" medical Treatment; but I dare not as yet (1786) decide how
" far it may be univerſal.

" There are annexed to this great Diſcovery, circumſtances of " the moſt aſtoniſhing nature, which it would be imprudent to " hold out to thoſe who do not intend to purſue the ſubject. I " neither expect nor deſire you ſhould pin your faith on my " ſleeve, but adviſe you to ſeek conviction and truth from the " evidence of your ſenſes.

" I again invite the Faculty; fix of whom I will inſtruct gratis, " on condition that they promiſe to receive nine poor patients " every day at their Public Treatment for cure.

" I am accuſed of introducing a doctrine injurious to the inte- " reſts of my brethren. My anſwer is very ſhort: Let them learn " it; if found beneficial, uſe and improve it; if not, lay it aſide, " as we have done many faſhionable medicines. Whilſt doing " good to Mankind, I am as indifferent to approbation as diſre- " gardful of cenſure, being dependant on no man.

" Thus far I have, at the expence of a conſiderable part of " an independent fortune, invited the Curious, and importuned " the Faculty, to witneſs a truth, which, if properly purſued, muſt " lead on to further diſcoveries of the greateſt moment; a truth " which has repeatedly reared up its head, and has as often " been cruſhed by the ignorance of its followers. This is the " firſt time it has been diveſted of quackery and expoſed to " public examination; and I glory in being the only Man who " am hardy enough to endeavour to convince Mankind, that " they want neither animal, vegetable, or mineral preparations " to produce effects on animate and inanimate Beings; that they

" poſſeſs a power in themſelves of which they are ignorant, and
" want but little inſtruction to do more than they are aware of.
" I open to you an aſtoniſhing field, if you dare to cultivate it;
" a field which muſt redouble the religioniſt's devotion, confirm
" the deiſt in the exiſtence of his God, and fill the atheiſt with
" aſtoniſhment."

This was the Doctor's addreſs in 1786.

In 1795, after the account of his medical life, he adds,

" I have already imparted theſe diſcoveries to two hundred
" and ſeventy Students; on whom I beg leave to call for teſti-
" mony; and who, though they are not at liberty to divulge
" the inſtructions they have received, during my life, are too
" well acquainted with the duty they owe to Society not to
" ſpurn at deception. Had I confined my diſcoveries to myſelf,
" or even a choſen few, my Medical Brethren and the Public in
" general might have room to think me culpable: but while my
" houſe is open to ſtudents at a ſum too inſignificant to be con-
" ſidered as an object of prevention, it muſt be concluded that
" parſimony, obſtinate pride, or unfounded incredulity, are the
" obſtacles to a general knowledge of what I am in poſſeſſion
" of; or of undeceiving the public, if I pretend to a knowledge
" which I can not explain."

The Doctor died on the twenty-second of March, 1797. His memory will ever live in the breasts of those who enjoyed his Friendship, and knew his Worth. The imperfect and incorrect state in which his Lectures and Manuscripts are left by his sudden and unexpected removal, the Admirers of the Science can not sufficiently lament, and the Public will have cause to regret, from the inaccuracies which may be found in these Lectures. But it has been judged preferable to submit them to the world in the Doctor's own language, lest, from the correction of any person not so thoroughly conversant with the subject, the sense should in any instance be altered.



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THE LECTURES

ARE DIVIDED INTO THREE PARTS.

PART THE FIRST

Compriſes the Principles of the Science, with the general, practical, curative Inſtructions for the removal of thoſe Diſeaſes to which the Human Frame is incident.

PART THE SECOND

Comprehends the Syſtem of Anatomy, with its preſent eſſential Diſcoveries and Improvements; accurately and fully deſcribing the Diſeaſes of the Human Body, and explaining the ſeveral Modes of Treatment adapted to their Removal by this Science.

PART THE THIRD

Contains the Practice of Midwifery, in which the Improvements and Diſcoveries dependant on this Science, are explained; and the different modes of aſſiſting, during Pregnancy, Delivery, and ſubſequent Period, clearly laid down.

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LECTURE I.

LECTURE I.

LADIES AND GENTLEMEN,

THE Subject which honours me with your attention, differs ſo widely from all received opinions, that to underſtand it clearly, it will be neceſſary to diveſt the mind of every imbibed prejudice. I flatter myſelf you will ſoon perceive that ſuperiority, which truth ſo uniformly maintains over all imaginary theories.

The more novel, and the more abſtruſe the ſubject, the greater the required attention, until, as in all new languages, the alphabet or outlines become perfectly familiar: this obſervation is peculiarly applicable to our preſent purſuit; ſince, without a clear idea of the *as yet* unknown mechaniſm of the human body, and of the atmoſphere in which it is placed, all deſcription of its diſeaſes, or inſtruction for their removal, muſt remain enigmatical and uſeleſs.

You are to learn the means of producing marked effects on the human body, without approaching or touching it; and to cure the diſeaſes to which it is incident, without the application or exhibition of any ſubſtance whatever. But it does not follow that ſuch effects ſhould be produced without cauſe, nor that ſuch cauſes ſhould be ſimple or inſignificant; on the contrary, they will be found to be natural, yet complex; concealed, yet familiar; abſent from our intimacy, yet ready at command; and now diſcloſed for a moſt ſerious purpoſe.

The mind, unaccuſtomed, by the general mode of education, to conſider that ſpot in the univerſe which we inhabit, in a ſufficiently extenſive light, conceives it to be a Globe, ſurrounded by an atmoſphere; that vegetables grow, and animals move and feed on that globe; whilſt Man is taught to conſider himſelf as a momentous creature, endued with ſovereign dominion over the lives and liberties of every other animated being.

It is taken for granted that the Earth is placed in the great expanſe, and ſurrounded by a medium of atoms, a part of which it attracts by the rapidity of its motion, and appropriates to itſelf as a conſtant attendant.

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But we ſhall find that this ſubject demands our more intimate acquaintance. That the Earth, its atmoſphere, and all their productions are only one, and that each is but a ſeperate portion of the whole, occaſionally produced, and received back into itſelf, for the purpoſe of maintaining a continual and a regular rotation of animate and of inanimate ſubſtances.

The apparent object of the ſcience is the removal of diſeaſes, and the detection of its cauſe. The neceſſity for the laſt is but too well known by thoſe to whoſe lot it has fallen to exhibit medicine: and the uncertainty of the firſt is ſeverely felt by thoſe who are unfortunately condemned to the uſe of drugs.

How fortunate for the preſent, and for future generations, if reaſon had taken a more early lead to ſave ours and our parents' conſtitutions from the baneful effect of *medical errors*, and from ſuch mineral and vegetable poiſons as deſtroy thoſe parts and proceſſes in our inimitably curious machine, as anatomical reſearches have not hitherto become acquainted with!

How painful the reflection, that ill-judged prejudice

ſhould be ſufficiently prevalent to ſhut out conviction, even from men of allowed candour in other reſpects; and that ſcholaſtic aphoriſms ſhould be ſo implicitly adopted, as to preclude the followers of the healing art from an impartial inveſtigation, though ſo loudly called for by continual want of ſucceſs!

Every regular practitioner was once a young ſtudent; read ſuch authors, and attended ſuch medical profeſſors as the age he lived in held up for eminence; having paſſed through their tuition, he adopts their opinions; and graſping to his practice each new ſuggeſtion, overturns even Nature in her moſt ſalutary efforts.

We often ſee a Cough, for example, moſt vigorouſly attacked by bleeding, by bliſtering, by expectorants, and by the whole train of weakening preſcriptions, ſo effectually ſilenced with the patient's loſs of ſtrength, as to encourage even the practitioner himſelf to pronounce the victim out of danger, even at the ſhort period of a few hours before his death. I wiſh it could be ſaid that this example was the only one of ſuch misfortunes.

How eſſential for mankind, to know, that all the alarming appearances of Fever, Ague, Cholic, and Convulſion, ſo voluminouſly written on, and ſo laviſhly preſcribed for, are *ſymptoms* only and not *diſeaſes*; that they are efforts of Nature, critically ſet up to cure herſelf, and conſequently, that they are to be cheriſhed and encouraged; by which means they become efficacious and ſucceſsful: and that every attempt by bleeding, by vomiting, by purging, or by regimen, to remove them, is injurious and deſtructive, and by no means to be ſubmitted to!

As our preſent diſcoveries throw a totally new light on the formation of the human body, on the atmoſphere in which we vegetate, and on the animal œconomy; ſo they give us the true ſyſtem of diſeaſes, their origin and their progreſs, and afford us the certain means of removing every curable diſeaſe without any the leaſt aſſiſtance from medicine or from mechanical contrivance.

We no longer want ſymptoms to guide our judgment, nor drugs to produce evacuations; we poſſeſs within ourſelves the power of inducing thoſe effects, and are kindly furniſhed by our great Creator with the neceſſary

means of aſcertaining and removing ſuch diſeaſes, provided we properly ſeek for the invaluable privilege of calling them into action.

This moſt exalted Power of aſcertaining and of removing diſeaſes, is not a new acquiſition, it is a faculty inherent to man; it is not of accidental production, nor of dubious efficacy; but it is ſtamped by the unerring Hand of the Almighty on his creatures, for their reciprocal advantage: this Power had ſunk inſenſibly into oblivion by depravity of manners, and is once more reſtored to cultivation, for the temporal and eternal benefit of thoſe by whom it is PROPERLY received.

THE EARTH

Is the firſt object of our inveſtigation.

The Earth is a globe, ſurrounded by its atmoſphere. To form an idea of that globe, its atmoſphere, and inhabitants, we are naturally led to conſider it in an original ſtate, from which it muſt have arrived at that in which we now ſee it.

As it appears to be compoſed of ſolids and fluids; that the fluids may, by cold, be rendered ſolid, and the ſolids, by heat, become fluid; we naturally conclude the entire maſs muſt have been originally either ſolid or fluid.

It will appear to be perfectly indifferent for our theory, which of thoſe ſtates firſt exiſted, but as it is neceſſary to make choice of one to aſſiſt deſcription by, I take that of univerſal ſolidity, or privation of heat.

The Earth, we will ſay, was ſolid, at reſt, and compoſed

of very minute particles of matter of three different kinds; that is, earth, metals, and ice.

Thoſe component parts of the Earth and atmoſphere, are not promiſcuouſly thrown together to form the *Globe*; but are wonderfully arranged in ſtrata or layers; this appears in perpendicular ſections of the earth; in the edges of land divided by the ſea; and in currents and clouds, paſſing at the ſame time in contrary directions in the atmoſphere.

The Earth is allowed to be, and really is, furrounded by its atmoſphere. But if the Earth and its atmoſphere were ſeen as a diſtant object, the entire would appear as one ſolid maſs.

If the Earth and atmoſphere had continued in a ſtate of ſolid congelation, no fluidity, and conſequently no vegetation, could ever have taken place; becauſe fluidity is eſſential to vegetation.

To convert ſolidity into fluidity, heat was neceſſary; that is, it was neceſſary that thoſe atoms ſhould become detached and ſeparated from each other, which had

been contracted and cloſed together by cold, and this, heat only could effect; it was requiſite that this degree of heat ſhould be produced by ſome cauſe, and that cauſe we ſhall find to conſiſt in action.

By Action, we underſtand the ſtriking or rubbing of one particle, or maſs of particles, againſt another, this proceſs of action produces a return of the ſtroke, which is called re-action. The continuance of ſuch percuſſions induces and creates heat, and the ceſſation of friction or action gives again place to cold and ſolidity.

As action and re-action produce heat, ſo encreaſed action augments the degree of heat by which the atoms of the heated ſubſtance become deſtroyed in their natures, and ſeparated from each other, producing what we call fire, flame, and light. This a few trite examples will amply prove.

The blackſmith produces heat, and lights his forge fire by filing or hammering a piece of iron, and applying to it ſtraw or any other ſubſtance whoſe pores are very open, and in which any oily or unctuous matter is contained.

Carriage wheels take fire when the axletrees are not ſufficiently greaſed to prevent friction, or action and re-action between their ſurfaces.

Action and re-action between a piece of flint and ſteel, or between two flints, will cauſe a ſufficient degree of heat to render the atoms, ſtruck off in a ſtate of ignition, thereby becoming luminous melting globes.

Boats are ſet on fire by the running out of the line, to which the harpoon is fixed, in the whale fiſhery.

The native of Africa and India produces his fire by rapidly twirling a piece of wood in a hole dug in another ſoft log for that purpoſe.

In ſhort, a great number of inſtances may be advanced in proof that the familiar proceſs of action and re-action are the requiſite ingredients for the production of heat, and for the converſion of ſolidity into fluidity. And the whole conſpires to explain the means by which the earth and its atmoſphere may have been adapted to circulation and life.

Let us ſuppoſe the globe of earth placed by the Almighty Fiat, with many others of various ſizes in a vaſt expanſe of atoms, all which are in motion, and employed perhaps in their reſpective allotted departments.

Thoſe moving atoms muſt have ſtruck or actioned the external ſurface of our globe; re-action muſt naturally have followed, and heat muſt have been the reſult. When, by continuance of this proceſs, the degree of heat had arrived at thirty-two and a half of Farenheit's thermometer, the particles of ice muſt have thawed into water; the motions of the particles of water muſt have encreaſed the proceſs of action, and conſequently the heat muſt have become more general, and gradually penetrated the entire globe, from ſurface to ſurface through the centre, in every direction.

By this proceſs thoſe particles of matter were rendered fluid, which, whilſt in a ſtate of ſolidity, filled up the intermediate ſpaces between other particles of a leſs ſoluble nature: ſo that now, particles of water or diſſolved ice enjoy a free paſſage through thoſe ſpaces, and amidſt thoſe atoms actioning in their paſſages every particle with which they come in contact. Thus the

neceſſary heat is continued, and ſufficient fluidity preſerved, to admit of circulation and vegetation through the entire maſs of earth and atmoſphere.

We can have no difficulty to conceive, that whilſt this natural proceſs continues regular and general in its execution, the globe muſt be in a ſtate of health: and that, on the contrary, when, from any cauſe whatever, ſome of thoſe ſpaces become obſtructed or ſtopped, or the circulation of fluid atoms by any means impeded, that that part of the globe, or of its productions, in which ſuch derangement occurs, muſt be conſidered as obſtructed or diſeaſed. Hence a general axiom, that every part of our globe, whether earth or atmoſphere, whilſt it continues unaffected by obſtruction or ſtoppage of circulation, is in a conſtant and regular ſtate of action and re-action, and conſequently is employed in the great work of producing and maintaining a ſufficient and uniform heat for the preſervation of fluidity and circulation, without which all vegetation muſt ceaſe.

This proſpect of the Earth, changed from ſolidity to fluidity and circulation, leads us to examine the general atmoſphere, abſtractedly from its earthy part.

THE GENERAL ATMOSPHERE

Is that part of the earth which we conclude became firſt fluid by action, re-action, and heat; ſo that the external limits of the atmoſphere are the bounds of the earth.

The atoms which conſtitute the Atmoſphere are ſimilar in their natures to thoſe which we call earth, but infinitely more minute and delicate; thoſe of the earth being a depoſition from atmoſphere, attracted by the Creating Hand to the centre of the globe, for the great purpoſe of animal vegetation.

It is neceſſary to acquire a diſtinct idea of the limits of this atmoſphere, and to recollect, that its firſt ſtratum or layer, begins, or is in contact, with that layer of the earth on which we vegetate; elſe we may be led to conſider the atmoſphere as beginning over our heads; we are from feet to head in that very medium, as fiſh are in water, but without their privilege of aſcending into the other layers, without ſome mechanical aſſiſtance.

As we proceed in our future converſations, we ſhall have occaſion to conſider thoſe atoms which conſtitute the ſeveral ſtrata of the general atmoſphere, both in their homogenial or pure ſtate, and in their heterogenial or blended one. It is ſufficient for our preſent purpoſe to obſerve, that they are at all times in motion; that, from layer to layer, they are ſubject to diſeaſe from the intruſion of atoms impure in their nature, which inſenſibly accumulate into clouds or obſtructions; and that thoſe atmoſpherical ſpaſms or convulſions which we are accuſtomed to call tempeſt or ſtorm, become frequently neceſſary for their cure; or, in other words, for the diſperſion of their accumulated diſeaſes.

The general atmoſphere is that medium in which human and animal beings, as well as vegetables, grow; all which are aſſemblages of thoſe very atoms which conſtitute the Earth and its atmoſphere, and are not bodies compoſed of other materials, and placed in that medium. The only eſſential difference between the particles which are employed in the formation of bodies, and thoſe which are not, is, that ſuch as are moulded into forms, are altered in their qualities by action, re-action, and heat; whilſt the detached particles freely paſs in every

direction between thoſe which are aggregated into forms for their nutrition and increaſe.

This proſpect of the entire maſs of atoms which compoſes our globe, or the earth, atmoſphere, and inhabitants, deſtroys all diſtinction amongſt them, and fully aſcertains a *material verity;* that an univerſal connection muſt ſubſiſt between every particle, and maſs of particles, contained within the bounds of that earth and its atmoſphere, whether they be comprehended under the title of ſolids or fluids, or diſtinguiſhed by the particular appellation of men, beaſts, birds, fiſh, trees, plants, or graſs; they are all evidently particles of the ſame original maſs, and are in regular rotation employed in the work of forming, nouriſhing, decompoſing, and of again re-forming bodies or maſſes.

GENERAL CONNECTION.

We ſhall, in the courſe of our converſations, meet with ample proof, that a regular attachment univerſally exiſts between all particles of a ſimilar nature throughout the entire globe and atmoſphere; and it will obviouſly appear, that thoſe connections are not deſtroyed by the accumulation of ſuch atoms into maſſes, but that they retain the power of producing impreſſions on each other, or of affecting ſimilar atoms.

It will appear alſo, that all forms compoſed in and of any medium of particles, muſt be influenced by whatever affects that medium, or ſets its particles in general motion.

Take, for example, a quantity of ſand, and drop into ſeveral parts of it any gummy ſolution; each of theſe glutinous drops will accumulate a number of the grains of ſand into forms of different ſhapes; each heap will be an aſſemblage of atoms into a form; will be evidently a portion of the general heap of ſand; will be compoſed of the ſame kind of particles; and will ſtill

continue in that general maſs no otherwiſe differing from the entire heap, than by the grains of ſand which compoſed that form being attached to each other.

Now, as all the grains of ſand which conſtitute this heap and its gummed-together forms, are in contact with each other; if one of the grains be put in motion it muſt ſtrike thoſe which ſurround it, and theſe again muſt affect the next; and ſo all the particles of ſand contained in the entire heap, muſt in their turn become affected.

A piece of water affords a ſimilar example: water is as literally compoſed of detached atoms, as the heap of ſand; and the fiſh contained in it are compoſed of the very particles of that water, and are accumulated heaps of atoms; ſo that the general detached atoms of water are in looſe contact with each other, and with thoſe atoms which are accumulated to form fiſh.

Now, if we ſtrike this piece of water, or throw a ſtone into any part of it, we perceive the impulſe communicating by the agitation, and can not doubt, but each

fiſh muſt be affected, when that part of the water which ſurrounds it receives the impreſſion.

If we bring theſe two examples home to the ſtate of the earth and atmoſphere, each of their mediums and productions will appear to be ſimilarly ſituated, and ſimilarly affected by ſimilar cauſes; ſo that every form in the earth and atmoſphere muſt receive and partake of any impulſe received by the general medium of atoms, in which and of which they are formed, whatever may be their number, or the extent of their medium.

Having taken a view of the particles of matter as occaſionally collected into forms or bodies, we are now to conſider the laws to which ſuch forms are ſubject.

COMPOSITION.

ALL forms are ſubject to one general law; that is, ſome of their conſtituent atoms are rendered fluid by heat; and the fluid ones form ſtreams, and convey into the form atoms for its increaſe and nouriſhment: this is called Compoſition by vegetation and circulation.

Circulation conſtantly brings in particles for the growth and nouriſhment of every form, from the time of its compoſition; and thoſe particles are converting, by action, re-action, and heat, into ſuch kinds as the nature of each part demands, and ſupplying the places of thoſe which are rendered uſeleſs.

The particles brought in, and employed for the nouriſhment of each part, loſe of their nutritive quality, and are rejected or thrown out of the form; whilſt circulation keeps up a conſtant equilibrium.

Thus, circulation not only brings in particles for the growth and nouriſhment of each part, but it carries off, alſo, the uſeleſs ones out of the body.

It is difficult to ſay which of theſe operations is moſt eſſential: if particles were not brought into the form, the proceſs of compoſition muſt ceaſe, and the form fall into decay; and if thoſe particles, whoſe virtues are exhauſted, were not expelled, obſtruction muſt ſoon ariſe and deſtroy the form.

The paſſages through which theſe particles paſs in and out of all forms, are called Pores; and the atoms expelled through them come under two denominations.

POROSITY.

The univerſal Poroſity which exiſts throughout nature, is in itſelf a moſt curious phenomenon: but the poroſity of human forms becomes a neceſſary object for our attention. It would be impoſſible to comprehend it as extenſively as our practice will appear to demand, without keeping in view the formation of bodies in general, and of the human form in particular.

By a Pore, we are to underſtand a ſpace formed between every two ſolid atoms in the entire vegetating world, by the liquefaction of the atom which, when ſolid, filled up that ſpace.

The intent of pores is to allow the paſſage or circulation of fluid, and of atmoſpherical atoms throughout all nature, and in every direction.

As circulation, vegetation, and conſequently animal life, aroſe from the formation of pores; ſo the deſtruction of them muſt terminate every proceſs of animal exiſtence, and conſequently each partial derangement of

poroſity induces *incipient* deſtruction of the form, or what is called diſeaſe.

Hence it appears, that action and re-action are requiſite for the production of heat, which alone can induce fluidity; by which pores are created and perpetuated; circulation admitted; and vegetation conſtituted. That every form is a part of the earth and atmoſphere, is maintained by the laws of matter, whoſe purport is to aggregate atoms; to convey nutrition; to diſcharge ſuperfluity; and to continue animal exiſtence.

This leads us to conſider Vegetation.

VEGETATION.

By the term Vegetate, it is generally underſtood, the growth of plants without ſenſation: but we muſt employ that term in a more extenſive light, and ſay, that action, re-action, and heat, create fluidity, pores, and circulation; that circulation, by conveying and depoſiting nutritious atoms in the various parts of the form, produces its growth or vegetation; that vegetation expands the ſeveral parts in their early ſtage; increaſes them in their prime; and nouriſhes them in their partial decline, or decompoſing ſtage: and that

Decompoſition overturns the eſtabliſhed laws; deſtroys each ſeparate proceſs; and

Terminates Animal Vegetation.

ATMOSPHERE AND EMANATIONS OF THE FORM.

EVERY form, whilſt in the act of vegetation, is governed by thoſe laws to which the earth is ſubject; that is, the ſolid atoms are ſeparated by pores, and the fluid particles rapidly purſue each other through thoſe pores in every direction. This proceſs is called Circulation; by whoſe aſſiſtance atoms of various kinds are carried on, depoſited, and thrown out of each part of every form. Thus, every maſs of particles is continually compoſing, and partially decompoſing, throughout all nature.

Yet, though expelled from the circulating body, this immenſe number of atoms is not immediately condemned as uſeleſs: but the Almighty Wiſdom ſaw fit to ordain that each form ſhould be continually ſurrounded and protected by an atmoſphere peculiar to itſelf, compoſed of thoſe very rejected particles of circulating fluids, and analogous to the general atmoſphere of the earth.

This I have named,

The General Atmoſphere of the Form.

The ſolid parts of the body throw off, in the ſame manner, their uſeleſs particles. But theſe are not employed for the ſervice of the form, but become blended with thoſe of the general atmoſphere of the earth.

Theſe I have called,

The Emanations of the Form.

As it is eſſential clearly to comprehend this part of the doctrine, I beg leave to repeat, that

All animal and vegetable forms, whilſt ſupported by the acts of vegetation and circulation, are, at a certain diſtance from the form, ſurrounded by their own peculiar atmoſphere, conſtituted of minute atoms, ſent off from the circulating fluids, which having paſſed through its pores, accumulate around it, to compoſe an elaſtic covering.

This covering does not continue to be uniformly compoſed of the ſame ſet of atoms, but is continually detaching ſome of its atoms into the general atmoſphere, and as regularly receiving a freſh ſupply from the ſame ſource.

In the ſame manner, every ſeparate and diſtinct part of each form has its own peculiar atmoſphere; and all theſe ſeparate atmoſpheres paſs out through the pores to form this general one of the body.

Thus we perceive, that every ſimple object of vegetation has its own general atmoſphere; and that each ſeparate part of every compound form has alſo this elaſtic covering, all which combine to conſtitute the general atmoſphere of the form, which continually diſengages atoms from itſelf, and ſends them upwards into the general atmoſphere of the earth.

Thoſe emanations, ſo far as we have been accuſtomed to obſerve them in the uſual avocations of life, will appear to be very familiar to us.

We are perfectly acquainted with them under the title of Effluvia and of Evaporation; and we find no difficulty in receiving them on the nerves of our noſe, ears, eyes, mouth, or of our tongue, or in naming the object which affords us that impreſſion, whether it be ſugar, ſalt, opium, muſk, onions, garlick, fruits, flowers, fermented liquors, or ſpices: and ſimilar effects derive

from animals, whether hunted, or of that kind called game, or arrived at a ſtate of putrifaction.

Coal-pits diſcover their emanations by colouring the herbage black, over the whole extent of the mine.

Particles of gold emanate in the ſame manner from gold mines, and gild the branches of ſuch trees as hang over them.

The emanations which fly off from quickſilver mines and manufactories, affect the workmen's ſalivary glands; and mercury, uſed medicinally, ſilvers gold in the pockets and rings on the fingers.

Plumbers and painters are, too frequently, ſuffering proofs of the emanating particles of lead.

Brimſtone uſed internally or externally, emanates through the pores of the body, and tarniſhes lace on the garments, or ſilver in the pockets.

Emanations from the Earth appear on the ſurface of timber, or boards laid over it for a ſhort time.

Mercury begins to throw up particles in the thermometer-tube, after ſtanding about two years.

Sal Amoniac in five years produces a ſimilar effect.

Water diſcovers the atoms which proceed from it, by a miſt over its courſe, which becomes more or leſs diſcernible to our imperfect ſight, according to the ſtate of the general atmoſphere with which it is blended. Thoſe emanations affect the nerves of ſome people ſo powerfully, as to enable them, by walking over the part, to aſcertain even the ſize and depth of the ſtream or piece of water which throws up the atoms.

A Treatiſe, entitled, Botineau's Noſcopie, gives his method of aſcertaining, by a mixture of atmoſphere and emanations, not only the number of veſſels in a fleet, but even their ſize, the courſe they ſteer, and their reſpective diſtance from the harbour.

The Indian muſk-rat affords a curious proof of this ſubject, as it renders wine unfit for uſe, by barely running over the bottles which contain it. Here we at once perceive not only the minuteneſs of the emana-

tions which proceed from the animal, but that of the porosity of the bottle and cork which admit the emanations, and yet prevent the evaporation of the volatile atoms of the wine.

These, and numberless other examples, conspire to prove, that emanating atoms continually fly from the earth, and from all its productions; and that, as the earth, so all its forms are surrounded by atmospheres, and passed through by emanations peculiar to themselves.

RECAPITULATION.

Permit me to recapitulate the ſubject we have gone over.

Earth and Atmoſphere are one body, compoſed of Atoms.

Every Form is a part only of earth and atmoſphere, and is compoſed of ſimilar materials.

The Globe and its forms are all ſubject to the ſame laws, and are ſupported by Action.

Action produces Re-action; action and re-action produce Heat; heat produces Fluidity.

Fluidity produces Pores.

Pores produce Circulation.

Circulation produces Vegetation.

Vegetation produces Forms.

Forms are compoſed of Solids and Fluids.

Solids produce Emanations.

Fluids produce Atmoſpheres.

Atmoſpheres and Emanations produce partial Decompoſition.

Total decompoſition is Death.

Death and decompoſition return the Atoms to the general maſs for Re-production.

Having conſidered Nature from the ſtate of univerſal ſolidity to vegetation: and having purſued her on to the formation of animals, we are next to ſelect Man, or the Human Being, abſtractedly from the other forms.

In Man is compriſed, in miniature, the entire vegetating ſyſtem in its greateſt perfection. His form is compoſed of pipes, beyond conception numerous, and formed of particles, between which the moſt extenſive and minute poroſity admits, in every direction, the paſſage of atoms and fluids of various denominations.

A bony foundation, formed of particles, limits his ſize, and conſtitutes the ground-work of his figure. Theſe are covered with ſofter ſubſtances, and are moulded by them into beauty and ſymmetry: ropes, compoſed alſo of atoms, pull thoſe bones into motion; and the whole is nouriſhed by fluid atoms, drawn from the medium of his reſidence, and from the aliment admitted into his form.

If we conſider Man as an aſſemblage of atoms, his component particles will appear to be minute in the

extreme. An example of metallic minuteneſs may prepare us to conceive that of man.

If one ſingle grain of gold be melted in one pound of ſilver, that grain will become equally divided in the entire pound. Now, if one grain of that pound be diſſolved in aqua-fortis, the 5760th part of a grain of pure gold will be found to have fallen to the bottom of the ſolution.

How minute, then, muſt the particles of gold be, when divided in the pound of ſilver!

Mercury affords another example:

The globules of quickſilver divide ſo minutely by trituration with oil, gum, or water, as to become inviſible to the naked eye, and paſs through the human pores by friction; ſome of them circulate with the fluids, and paſs out again through the pores, whitening gold held in the mouth, or placed in the pockets.

Let us now take a view of the minuteneſs of animal matter.

Leeuwenhoek tells us, there are more animals in the roe of one cod fiſh than there are inhabitants on the face of the whole earth; and that he found, by comparing one of theſe animalculæ in the microſcope with one grain of ſand, that the ſand was bigger than four millions of the animalculæ.

Theſe examples naturally call forth our adoration of that Being, who alone is capable of forming theſe animalculæ, each of which muſt have veſſels for juices to circulate in, elſe it could neither live nor move. It is computed, that one ſingle particle of the blood which flows in ſuch a little animal's veſſels, muſt be as much ſmaller than a globe of the tenth part of an inch in diameter, as that globe would be ſmaller than the ball of earth which we inhabit.

Microſcopical experiments give us an idea of the poroſity of animal fleſh.

One ſquare or cubic inch of ſolid fleſh exhibits

Two hundred and fifty thouſand orifices of blood-veſſels:

Nine millions of veſſels called Lymphatics; and

Three billions, two hundred and forty-four millions of veſſels, carrying ſerum only, without red particles:

Making in all, in that one ſquare inch of muſcular fleſh,

Three billions, two hundred and fifty-three millions, two hundred and fifty thouſand orifices of pipes.

This is, I believe, as much as has at preſent been rendered viſible by the combination of glaſſes.

Sir Iſaac Newton ſays, "This whole globe of earth, nay, all the known bodies in the univerſe together, as far as we know, may be compounded of no greater a portion of ſolid matter, than might be reduced into a globe of one inch only in diameter, or even leſs."

What then ſhould we expect to ſee, if viſion was permitted to be perfect? No doubt, the entire body would appear like a honey-comb, with the moſt ſlender atoms of ſeparation between each pore.

This unlimited porofity is wifely ordained to afford a free paffage, in every direction, for the atoms of the general atmofphere; without which, the fpaces between the atoms muft clofe, and the fluids lofe all power of circulation: hence action muft ceafe, heat muft become deftroyed, and fatal decompofitiom muft take place.

By the continual paffing of the general atmofphere through the fyftem, it is at all times full of air. Sir Robert Boyle and Mr. Hales made the following experiments, by which they found, affifted by the air-pump, that

One cubic inch of Blood gave thirty-three inches of air: that Chyle and Milk contained ftill a greater quantity: that one inch of Fat yielded eighteen inches of air: that Bile encreafed in the exhaufted receiver to ten times its volume: and that Saliva fwelled to fourteen times its fize.

As this immenfe quantity of air is continually paffing in and out through every the moft minute part of the body; it is evident, that it muft carry with it into the form fuch atoms as may become mixed with it in the

general atmoſphere, and they muſt either paſs out again with the general atoms, or muſt, in conſequence of ſome accident, ſtop in their paſſage and be confined in ſome part of the body.

If thoſe atoms ſhould be of a poiſonous or deſtructive nature, they materially injure ſuch parts as they paſs through, or ſtick in. But if, on the contrary, they ſhould be healthy and natural, they materially contribute to the ſupport and nouriſhment of the form.

Of this we have ſtriking examples in butchers, publicans, cooks, and ſeveral other occupations, who, by living in the atmoſphere of nutritious ſubſtances, generally become corpulent, with ſlender appetites; whilſt painters, plumbers, dyers, and thoſe who are employed in the atmoſpheres of pernicious ſubſtances, become gradually diſeaſed, and frequently loſe the uſe of their limbs, a conſiderable time before decompoſition takes place for their relief.

Hence it appears, that the free circulation of healthy atoms through the entire form is neceſſary; that obſtructions of its poroſity, or ſtoppage of its circulating par-

ticles, muſt create derangement in the ſyſtem, and be followed by diſeaſe.

To obviate this evil, the Provident Creator formed in the body innumerable conductors, adapted by their extreme ſenſibility to convey information of ſuch impreſſions as they may receive on any part of the body, or of its extremities, to the ſenſorium, or ſeat of reflection, which, according to the nature of the impreſſion, or the injury received, agitates, ſhakes, or contracts the form, to thruſt forth the offending cauſe, and reſcue the ſyſtem from deſtruction.

This inimitable property in the animal œconomy, is Nature's eſtabliſhed mode of cure, acting more or leſs powerfully, according to the exiſting cauſe; and the efficacy of the exertion depends on the ſtrength of the ſyſtem.

If the ſyſtem is enfeebled, the efforts can not ſucceed, and the obſtruction accumulates.

Thoſe ſalutary efforts, ſo wiſely ordained for the occaſional removal of obſtructions, have moſt unfortunately

been miſtaken for diſeaſe, and divided and ſubdivided, in the ſchools of phyſic, under numberleſs titles. Hence the moſt violent, the moſt deſtructive, and the moſt poiſonous ingredients are employed to ſilence Nature in her ſalutary proceſſes.

The blood, which is the very eſſence of animal life, is laviſhly ſpilt; food, which is the principal ſupport of the ſyſtem, is prohibited; and frequent change of atmoſphere, ordained to reſiſt putrefaction, is made to give place to that of a confined bed-chamber.

If we add to this liſt of egregious errors, the frequent prepoſterous exhibition of drugs, we can not be ſurprized at the daily converſion of ſlight obſtructions into fatal diſeaſe, which our future diſcourſes will, we hope, enable us to conquer.

LECTURE II.

REGLURE II

LECTURE II.

IN our laſt diſcourſe, I obſerved that the nervous ſyſtem is the medium through which every impreſſion received on the form is announced to the ſeat of its judgment.

Thoſe impreſſions are comprehended under five ſeparate diviſions, called Senſes, and diſtinguiſhed by the titles of Seeing, Hearing, Taſting, Smelling, and Feeling; each name deriving from that part of the form, which receives the impulſe.

As every impreſſion is received through one and the ſame medium, diſpoſed over the entire form for that purpoſe, it may with great propriety be advanced, that there is but One ſenſe, and that all thoſe impreſſions, are diviſions only of the ſenſe of Feeling.

The accuracy of any of thoſe diviſions depends on the health of the nervous ſyſtem in general, as well as on that of each particular diviſion: but we have no ſtandard to aſcertain perfection by in any of them; conſequently our judgment on that head is drawn merely from the reſult of compariſon. The combination of glaſſes has introduced to our diſcernment ſome objects with which we were unacquainted, and has enabled us to look downwards at inferior claſſes. A greater degree of accuracy in the viſual organ, would perhaps enable us to diſcover far ſuperior ones: this, however, is wiſely withheld from us, as we ſhould probably be ſhocked at the ſight of what ſurrounds, paſſes through, and is continually taken into our forms. The number and ſize of the pores on the ſurface of the body, and the coarſeneſs of the moſt delicate ſkin, would repreſent us to each other as rough monſters, until cuſtom had familiariſed us to what muſt, at firſt ſight, appear ſo horrid and ſo diſguſting.

The nervous, or conducting ſyſtem, in the animal form, becomes a particular object of our purſuit: but we ſhall find it to be only a portion of a much greater one, ſimilar in its nature and department, but far more

extenſive in its employment. We ſhall render its exiſtence and influence familiar by conſidering the phenomena of Light and Sound, and ſhall perceive a general connection and a reciprocal influence ſubſiſting throughout the entire globe, and all its parts, by its intervention.

SOUND.

SOUND is a phenomenon which philoſophy has laboured to explain. The moſt approved theoriſts agree, taking their example from a Bell, that Sound is produced by the tremulous motion of its component atoms, and which alternately changes its ſhape, from round to oval, a million times in one inſtant.

That the ſhape of the bell alternately changes from round to oval, is proved by horizontally introducing a bar into the aperture, which counteracting one of the contractions, the bell muſt ſplit.

The atmoſphere is allowed to be compoſed of atoms; and the conveyance of Sound is accounted for, by the atoms being diſplaced, and forced backwards and forwards to and from the bell, by its alternate contractions in oppoſite ſhapes.

But this theory falls to the ground, by placing a lighted candle near the bell. If the general atmoſphere was agitated, wind muſt reſult, and the candle muſt be

extinguiſhed: whereas, we ſhall find, that the flame will not be agitated whilſt the bell gives its ſound.

As this experiment fully proves the impoſſibility of Sounds agitating the atmoſphere which ſurrounds the ſonorous object, let us quit ſight of that theory, to ſubſtitute the real proceſs.

In the general atmoſphere, of whoſe compoſition we are no longer in doubt, are found innumerable ſtrings of the very component atoms of that medium. The buſineſs of theſe ſtrings is to receive and to convey from and through every part of the atmoſphere, of the earth, and of their inhabitants, ſuch impulſes as they may receive.

I call theſe conductors,

Atmoſpherical Nerves.

The employment of thoſe nerves is ſimilar to that of the nerves of the human body, to which thoſe of the atmoſphere are connected, or rather, of which they are a part.

Every impreſſion in nature has its own peculiar ſet of

conductors, and no two ſets, or claſſes, interfere with or impede each other.

Thus the atmoſphere contains nervous conductors for Light, others for Sound; and ſo on, for every impreſſion; but thoſe nerves are not conſtantly, nor are they uniformly, called into action.

Let us again return to the BELL.

The ſtroke which produces the tremulous motion of its atoms, and the vibration of its form, produces alſo its ſound: this affects the neareſt atom of the nerves of Sound. That atom is not then detached from its ſituation, any more than is the firſt atom of the nerve in our finger ſent off to the head, to give notice when we accidentally hurt or prick it; but the impreſſion, which the atom receives, is communicated to the next atom of that nerve, and ſo, from atom to atom, it is conveyed along each conductor of Sound, in every direction, decreaſing in ſtrength, until it either dies away, or is re-inforced by another or by a ſtronger percuſſion.

As the atmoſpherical nerves are not ſingle threads,

but are compoſed of branches deriving, in every direction innumerably, from each other, the impreſſions they receive are conveyed on at all points; but they occaſionally meet with interruption, and are turned aſide by hills, by mountains, by buildings, and by other objects: yet they preſerve their property of conveying each its own particular impulſe along the courſe of their reſpective ſituations.

The nerves in human bodies are placed in every poſſible direction, ready to receive each impulſe, and to convey it on to the ſeat of our judgment: and in the ſame manner, nerves of Sound are univerſally placed, and prepared to receive each impreſſion. Every Bell is encompaſſed by Nerves of Sound: but the bell muſt vibrate to affect the nerve; and human or animal nerves muſt in the ſame manner receive the impulſe, to become the meſſengers of it.

But the atoms which conſtitute the atmoſpherical nerves, do not all communicate to each other, with equal rapidity, the impreſſions they receive; thence ſome impulſes are conveyed along the nerves more ſlowly than others.

For example:

The atmoſpherical nerves of Light deliver to each other more rapidly the impreſſion of Light, than do thoſe of Sound to each other, amid the nerves of Sound.

Hence philoſophical enquirers have been enabled to calculate the difference of the velocity with which Light and Sound are conveyed from place to place.

For example:

Light is found to travel at the rate of 198,000 miles in one ſecond of time.

But Sound is obſerved to make its way only at the rate of a quarter of a mile in one ſecond.

Theſe calculations give room for ſeveral curious experiments.

In thunder-ſtorms, for example, the burning vapour which conſtitutes the flaſh, explodes before the clap commences.

The flaſh is conveyed to us by the nerves of light at the rate of 198,000 miles in a ſecond; but the thunder-clap creeps on by the nerves of ſound at the rate of

thirteen miles in a minute. Hence, when we hear the thunder, we know we are ſafe from that exploſion of vapour, which muſt have paſſed off from us before the arrival of the thunder.

And by this comparative calculation of the velocity of Light and Sound, the thunder-cloud is computed to be diſtant about one mile, when we ſee the lightening five ſeconds before we hear the thunder.

The velocity with which a ball ſhot off from a cannon paſſes through the air, affords another ſatisfactory example:

Thoſe who are habituated to the uſe of artillery, are able to judge accurately of the direction in which a cannon is fired, by comparing with each other the two flaſhes of powder, one from the muzzle, and the other from the touch-hole.

They ſtand on a wall or fortification, and obſerving the firing of the diſtant cannon, ſay, This ball goes to the right; that, to the left: but the well-pointed one ſtrikes the ſpot, which they take care to leap from, as ſoon as they ſee the flaſh.

The ball paſſed through the air at the rate of three miles in one ſecond: but the light of the burning powder was conveyed to the eye at the rate of 198,000 miles in one ſecond: therefore, they had time to ſee the flaſh, and to get out of the direction before the arrival of the ball, which would have killed them before they could have heard the report of the gun; which report moved only at the rate of one quarter of a mile in one ſecond.

That the atmoſpherical conductors of Sound do not obſtruct each other, appears by Sound purſuing its courſe as well by day as by night: and that Sound is conveyed by conductors, appears when an eminence terminates the direction: if the general atmoſphere received the ſound, it muſt at that point become a confuſed noiſe; whereas, the next branch of that claſs of ſonorous nerves takes it up, and conveys it diſtinctly on, under the title of an Echo.

Having thus far eſtabliſhed the exiſtence of theſe wonderful aërial conductors, or atmoſpherical nerves, our next buſineſs is to claſs them.

I have already advanced, that every ſet of thoſe conductors has its own allotted department. This requires explanation, as it muſt not be received in a general, but in the moſt minute ſenſe.

Sound is the general term for a percuſſion of the atmoſphere, and the nerves of Sound are a general diviſion of thoſe from every other ſet of nerves in the univerſe. But, as Sound is compoſed of a prodigious number of varieties, diſtinguiſhed under the titles of Notes, or Tones, ſo the nerves of Sound are ſub-divided into as many different kinds as there are tones in nature, each tone having its own diſtinct conductor, which is no more affected by any other tone, than are the nerves of Light by thoſe of Sound.

It is neceſſary to introduce the nerves of the human body, in aid of our preſent deſcription; and to obſerve, that human and atmoſpherical nerves, are not independant or unconnected with each other: but on the contrary, that human nerves are continuations of the atmoſpherical: all animated Beings being only as warts or excreſcences, which have ſprung up in the atmoſphere, on and amidſt thoſe general atmoſpherical nerves; ſo

that all forms are paſſed through by them in every direction. Conſequently, what affects that part of the nerve which is atmoſpherical, muſt alſo affect that which we are accuſtomed to conſider as the nerves of the body.

Thus, the atmoſpherical nerves of Sound are parts of the auditory nerves, or nerves of hearing, in Man. The atmoſpherical nerves of Light are continued through man, to form his optic nerves, or nerves of ſight; and ſo on. Thus, the auditory and the optic nerves of one man are the auditory and optic nerves of every animated Being in the univerſe, becauſe they are branches ſent off from the great trees of the ſame denomination, in the parent earth and atmoſphere.

It may be aſked, how Beings move in the general atmoſphere, amidſt all this immenſe number of ſtrings; and what prevents their deſtruction or derangement, when the atmoſphere undergoes thoſe violent agitations with which it is ſo frequently affected?

This difficulty is preſently anſwered, by reflecting that aërial nerves are, like thoſe of animated forms, compoſed of atoms; thoſe which are accumulated into forms are in

cloſe, but thoſe of the atmoſphere are in looſe contact with each other, for this obvious reaſon, that the neceſſary preſſures and circulations may not obſtruct them in the confined form; and that the paſſages of ſubſtances or atoms through them may not injure thoſe which are at large. We may take an example from a hole in a window-ſhutter, through which a ray of ſun-ſhine is admitted; the atoms are viſible, and the hand paſſes through and amidſt them; but they inſtantly reſume their ſituations by their attractive connection.

That the nerves of the general atmoſphere, and thoſe of animate forms, are not ſeparate ſyſtems of conductors, will appear by following them in their reſpective occupations: and here we ſhall perceive every tone, note, or ſound in nature, to have its own ſeparate conductors in the general atmoſphere, and in every animate and inanimate form, by which alone it can be conveyed or imparted.

I ſhall endeavour to reſt this doctrine on example; and at the ſame time advance the following material facts:

That every inanimate ſubſtance is attached to its ſimilar.

That all animate and inanimate ſubſtances are attached to each other by every ſimilar part, in each of their compoſitions.

That all animate Beings are attached to each other by every ſimilar atom in their reſpective forms.

And that all theſe attachments are formed by atmoſpherical conductors or nerves.

For example:

Let two piano fortes, or other muſical inſtruments, perfectly in uniſon or accord, be placed, one at each end of any apartment, and it will appear, that whatever note is ſtruck on one will be repeated by the other inſtrument.

If the key of A be touched in one, the ſtring of A will vibrate in the other: if B be touched in one inſtrument, A will not vibrate in the other; but B will repeat the note: and in the ſame manner, any note in the entire ſcale will be anſwered by its ſimilar only, and by no other note in the inſtrument.

If this ſound or impreſſion affected the general atmoſphere of the apartment, every ſtring muſt receive the

influence, and all muſt vibrate and give tones. But as each particular note has its own peculiar conductor already arranged in the atmoſphere, the neareſt atom of the conductor of the influenced note, having received the impulſe, communicated it to the next atom of the ſame conductor, and ſo on, until the atom in contact with its ſimilar in the other inſtrument, received and imparted it to the ſtring, and ſat it in vibration. When B was ſtruck, the ſame proceſs took place, but the impreſſion was not conveyed to A, becauſe they are not ſimilars, nor attached to each other, nor conſequently can they be affected by the ſame conductors or atmoſpherical nerves.

Hence it appears that two muſical inſtruments, or inanimate ſubſtances, are attached to each other by as many diſtinct bonds of connection, as they are capable of producing ſimilar ſounds.

Let us now ſuppoſe any unlimited number of muſical inſtruments placed in one or in ſeveral contiguous apartments, and we ſhall find that when A, B, C, or any other note is touched in any inſtrument, the ſimilar note *only*, in the ſame manner vibrates in every other inſtrument. The concluſion muſt be obvious, that every inſtrument is

attached to that which was firſt touched, that all the inſtruments are reciprocally attached to each other, by as many points as they are capable of giving ſimilar notes; and that the inviſible atmoſpherical nerves are the immediate bonds of connection, and not the general atmoſphere of their ſituation.

That this effect is not confined merely to muſical inſtruments, appears by various inanimate objects of ornamental furniture, china-ware, glaſſes, and other ſubſtances, vibrating in the ſame manner to ſuch tones as they are in uniſon with when that note is affected in any other inanimate object.

This proves that all ſimilar parts of inanimate ſubſtances are attached to each other by atmoſpherical conductors, and that they are affected by each impulſe, carried on their conductors.

This leads us to conſider the influence between animate and inanimate ſubſtances: and it appears that by whiſtling, ſinging, or ſpeaking, amidſt glaſſes, china, and earthen ware, muſical inſtruments, and many other kinds of ſonorous objects, the notes or tones ſo made will be

repeated by the vibrations of thoſe objects; and inſtances are not wanting of ſuch brittle ſubſtances being broken by the violence of their vibration.

Let us take another example:

The notes played on a thouſand inſtruments of muſic are diſtinctly heard by the ears of perhaps five times the number of human Beings, aſſembled in Weſtminſter Abbey: and martial notes may be heard by fifty thouſand ſoldiers in the field. As each note has its peculiar conductor in the general atmoſphere, ſo each ear muſt be connected with the atmoſpherical conductor of each note. So that every note has not only its ſeparate conductor in the atmoſphere, but alſo its ſeparate conductor in every ear.

Hence it is evident, that animate ſubſtances, as well as inanimate ones, are in the ſame manner attached to each other.

Let us now conſider this influence in animate forms only, and we ſhall find them to be affected by their ſimilars exactly in the ſame manner.

The ſenate, the pulpit, the theatre, military diſcipline, and a number of familiar inſtances, prove that each individual of an aſſembled multitude diſtinctly hears each word delivered by the ſpeaker; which words, or notes, muſt be conducted to each of their ears by conductors, placed in the general atmoſphere, and not by a general percuſſion of the atmoſphere, as in that caſe the notes, or words, could not be intelligible, nor could the confuſed noiſe be tolerable.

Hence it appears, that all our Globe is replete with conductors, appropriated by the Great Creating Hand, to the aſtoniſhing buſineſs of receiving and conveying each its own peculiar impreſſion, from object to object, and from place to place, throughout the entire earth and atmoſphere; and that each animate form is ſo wiſely attached to thoſe conductors and to each of its ſimilars, as to receive reciprocal impreſſions for various purpoſes; but above all, for that of fulfilling the eſtabliſhed ordinance of ſympathiſing benevolence and charitable aſſiſtance to each of its ſimilars, all of whom muſt appear in the ſtrongeſt light to be members of one and the ſame body, formed of one and the ſame maſs, attached to each

other by indiſſoluble bonds, and, in the ſtricteſt ſenſe, brothers and children of one Univerſal Parent.

As the theory of Light affords an additional proof of the doctrine I advance, a few words on that ſubject may not prove unwelcome.

LIGHT.

PHILOSOPHY tells us that the rays of light are ſhot off from the Sun, which is ſuppoſed to be a body of fire; and that they run through the atmoſphere at the rate of twelve millions of miles in one minute, to ſtrike our eyes, our body, or our earth.

Reflection effectually overturns this doctrine, and ſhews that the moſt minute atom, impelled with ſuch velocity, muſt deſtroy the eye, or break through the body.

A ray of Light is not ſhot off from the ſun, but the conductors of light receive the luminous impreſſion from the ſun, and communicate it from particle to particle along the luminous nerve.

The Sun is, I have no doubt, a luminous body; but whether the Light it affords to other bodies is engendered in it, or only reflected by it, ſtill remains unaſcertained: ſeveral circumſtances concur to render the laſt moſt probable.

For example:

Travellers are ſometimes found frozen to death in the high mountains, called the Andes, in the torrid Zone, and are obliged to guard againſt the exceſſive cold with the greateſt precaution; and yet, from their proximity to the Sun, if it was an immenſe body of fire, we ſhould expect rather the danger of being burned than frozen to death.

Balloon adventurers unanimouſly complain of the exceſſive cold they ſuffer as they approach the Sun.

But the univerſality of Light is a part of that ſubject which more immediately claims our attention.

As every form or maſs of atoms is ſo exceedingly porous as to contain more ſpace than matter, and as the nerves of Light penetrate and paſs through all bodies, conveying with them ſome degree of light, which from their proximity to the ſun they continually receive, it follows that no part of the earth or atmoſphere can be totally dark, and that there can not exiſt ſuch a ſtate in nature as total darkneſs, whilſt the Sun continues to be a luminous body.

We are led into the erroneous idea of Total Darkneſs, from the imperfect ſtate of the diviſion of the faculty of feeling, by our eyes, without having any ſtandard of perfection to judge from; all our gradations of Light are merely the reſult of compariſons, made from different degrees of imperfection, in the viſual organ. Every experiment and obſervation terminates in allowing the impoſſibility of diſcovering any ſituation, in which ſome animated Being or animal production, cannot ſee ſufficiently, to perform its own avocations.

The darkeſt ſubterraneous vault or cellar, though it immediately ſhews no veſtige of light, becomes inſenſibly ſo altered, that the ſurrounding objects are diſcernable.

Priſoners confined in dungeons, begin after a month, or longer, to perceive the nature of their walls, conſequently an improvement muſt have taken place in their faculty of diſcovering objects by the nerves of viſion; and it is evident the dungeon was not totally dark.

The Cat catches its prey, as well as the Owl, in what we conſider as darkneſs. The Mole knows no want of light in his ſubterraneous manœuvres.

In Human Beings, we have as ſtrong inſtances, as thoſe in the Brute creation.

A Girl at Parma ſaw objects as diſtinctly at midnight, though her window ſhutters were perfectly cloſed, as ſhe could by day-light.

Briggs gives an account of a man who read letters in the night.

Mr. Boyle tells us that a Gentleman confined in a dungeon, began in a few weeks to diſcover light; it daily increaſed, ſo that he could diſtinguiſh his bed, and other large objects; at length he plainly ſaw rats, running about, and picking up his crumbs.

The Emperor Tiberius,
Scaliger, and his ſon Joſeph,
Marcus Antonius Sabellicus,
Hieronymus Cardianus,
Cælius,

Aſclepiodorus, and a very long liſt of names, are all upon record, for ſeeing and reading well in the darkeſt nights.

Fabricius ab aqua pendente, tells us of a man at Piſa, who ſaw well in the darkeſt nights, but obſcurely by day.

Julianus, a Monk, conſtantly read in the darkeſt nights, and never lighted a candle for ſeventy years.

In all theſe inſtances we perceive there was no want of Light, and yet other people called it perfect darkneſs; conſequently the defect muſt have been in the viſual organ of thoſe who could not diſcover Light.

But we have many inſtances of human ſight receiving this improvement by accident, by inflammation, by drunkenneſs, by fevers, by fits of paſſion, during which time all appeared light, which but the moment before was deemed perfect darkneſs.

Mr. Boyle, Briggs, and ſeveral other Authors, confirm theſe accounts, and give inſtances which it would take up too much time to repeat. One only I beg leave to ſelect from the Journal des Sçavans.

A gentleman received a ſtroke in his eye by the ſnapping of a lute-ſtring; inflammation was ſet up, and to his aſtoniſhment, he could from that inſtant diſcover the moſt minute objects, and read the ſmalleſt type in the greateſt darkneſs, but was perfectly dark of that eye by

day or by candle light; ſo that he habitually uſed the inflamed eye in what others called darkneſs, and the other eye by day.

In ſhort, every circumſtance tends to prove that light is continually preſent in every ſituation, but not at all times in the ſame degree, and that there is no ſuch ſtate as abſolute darkneſs, or privation of light in all nature.

Having eſtabliſhed the exiſtence and the departments of general and particular Nerves in the globe and in its forms, we are to conſider the means by which we can occaſionally affect them for ſalutary purpoſes.

VOLITION.

NOTHING in nature can be more familiar than the various modes of employing the body, the head, and the extremities: every part, whilſt in health, moves and acts obedient to command. And yet, how unanxious is the poſſeſſor to inveſtigate a phenomenon of ſuch importance! We now and then hear of a ſported opinion on muſcular motion; where the writer, after dividing and ſub-dividing muſcles, fibres, nerves, and ideas, huddles up a concluſion, drawn from nervous ſenſibility, and leaves the ſubject exactly where he found it.

Medical practitioners, and more eſpecially anatomiſts, ſhould, of all mankind, be the moſt virtuous, the moſt moral, and the moſt religious. The frequency of their witneſſing death-bed ſcenes ſhould impreſs them with that awe for futurity, which palls the gôut for diſſipation. The inveſtigation of the dead body ſhould convince them that nothing can be found in it which could ſet that complex machine in motion, or guide its thoughts and actions.

The contraſt between its mangled ſtate, and that in which they ſo lately ſaw it, ſhould impreſs them with the certainty of being themſelves ſpeedily in a ſtate of diſſolution. And the inimitable mechaniſm of the whole body ſhould leave no ſhadow of doubt of its having been formed and governed by a very ſuperior SOMETHING, to whoſe Power it muſt be ſubject, by whoſe pleaſure it muſt be influenced, and at whoſe diſpleaſure he muſt be leſs than rational, or totally abandoned, not to tremble and ſhrink.

It is evident that the human Body is formed of that very Earth on which it moves; that it is nouriſhed by receiving ſome of that earth into its form; that animal life depends on action, re-action, heat, and circulation; that ſenſible ſtrings are formed in it for the purpoſe of tranſmitting impreſſions; and that thoſe ſtrings, by contracting, pull ſuch parts of the form as are required to act.

Still thoſe ſtrings are merely inſtruments employed by an agent, and that agent muſt hold dominion over them.

Each part of the body has its peculiar department:

they are all wonderfully adapted to complete that machine, which, when finiſhed, is deſtined implicitly to obey a ſtill more eſſential, though to us an inviſible Agent.

The Bones are the ſupporters of the form, and limit its height.

The Muſcles and Fat model its ſhape and aſcertain its ſize.

The Nerves are ſtrings of ſenſibility, and meſſengers between body and mind.

The Mind is the arbitrator over the bones, the muſcles, the nerves, and the body in general; and is that Something, which the anatomiſt's knife can neither diſſect, diſcover, nor deſtroy.

But to define what that Something is, we muſt apply to the words of our Saviour. He ſays,

" It is not ye that ſpeak, but the Spirit of your Father which ſpeaketh in you." Matt. x. 20.

" It is the Spirit that quickeneth, the Fleſh profiteth nothing." John vi. 63.

" Know ye not, that ye are the Temple of God, and that the Spirit of God dwelleth in you." 1 Cor. iii. 16.

"A Spirit hath not Fleſh and Bones." Luke xxiv. 39.

And when he died, he ſaid,

"Father, into thy hands I commend my Spirit." Luke xxiii. 46.

Many other paſſages in the ineſtimable Inſtruction which our Saviour left us, inconteſtibly prove, that the Body is unprofitable and valueleſs; that its actions are not its own; that the Spirit, which holds dominion over the nerves, is the inviſible Power which guides the motion of the limbs, and of the tongue that utters the words. The deciſions, the adoptions, and the commands of the Spirit are Man's Volition; by which he walks, runs, becomes recumbent or erect; and in ſhort, without which the Body muſt remain ſilent and paſſive.

Thus, though there appears to be two powers in Man, the one a Mental influence, and the other Corporeal activity, yet the latter is not only perfectly dependent on the former, but is incapable of acting by itſelf or without its Volition.

Every word, every action muſt undergo a certain mental proceſs before it can be conſigned to the form for

execution. This proceſs will appear to be compriſed in three diviſions.

A Thought, or Influence, muſt firſt be conveyed to the Spirit, or Mind, by ſome viſible or inviſible agent. This the Spirit is perfectly free to adopt or reject.

Having arrived at this ſecond ſtage, volition ariſes; that is, the Spirit commands ſome part of its body to execute its will, and for that purpoſe tranſmits its decree by the nerves or conductors of its Volition, to that part of the form, whoſe department it is to act, according to the nature of the object.

Hence it appears, that previous to corporeal exertion, a thought muſt be received, attended to, and adopted; an intention muſt be formed, and the ſpiritual Volition muſt command corporeal execution.

It is evident, that the body is unconcerned with the whole proceſs, until it is commanded by the Spirit to act.

The firſt part, or that of receiving a ſuggeſtion, is

conſonant with the intent of man's creation, and is deſigned for the Spirit's information, and is ſubſervient to the buſineſs of the Spirit. The ſecond, or the inveſtigation of the impulſe, is dependent on Volition. The encouragement of the thought is alſo dependent on Volition; and the orders for its execution, are moſt fully the act of ſpiritual Volition.

This elucidates the proceſs which each thought or ſuggeſtion undergoes in the Spirit or Mind, previous to execution, and fully accords with the words of our Saviour, that "from within proceeds every kind of ſin and wickedneſs:" Mark vii. 20 to 23. and again, that "by thy words thou ſhalt be juſtified, and by thy words thou ſhalt be condemned." Matt. xii. 37. So that the Spirit is anſwerable for every adopted thought, uttered word, and act committed by the Body, as none of them could be received or executed without the expreſs Volition or command of the Spirit, and without which Volition, the Body is completely a cypher.

The neceſſity for an exertion of the will is obvious, but the mind is not accuſtomed to inveſtigate the means by which it is performed, nor to ſeek for the privilege

of improving Volition beyond the barely common neceſſary avocations of life.

The execution of any ſubject depends phyſically on the length of time neceſſary for its performance, and on the undiſturbed continuance of the act of Volition, during that time. The leaſt interruption, or the change of the will to any other ſubject before the firſt intention is accompliſhed, totally deſtroys the influence, leaves the act incomplete, and often renders ſucceſs more difficult, from the eſtabliſhed law of habit and cuſtom, or the tenacious propenſity in every form to retain that ſtate to which it has arrived.

This axiom is unalterable: that to produce ſalutary effects in our ſcience, the Suggeſtion muſt be pure and moral; Attention muſt be ſteadily fixed on the ſubject; Intention muſt be ſingle, ſteady, and unwavering; and Volition muſt be vigorouſly exerted, continuing unvaried and unrelaxed, until the purpoſe is accompliſhed, or totally relinquiſhed.

It will appear upon the whole, that a power of Volition may, if properly ſought after, be called forth

in Man, in a far more exalted degree than that which we exert for our general avocations. A power which is ſubordinate to a far Superior One, by whom it is portioned out to individuals, according to the purpoſes for which they exert it, and is, in part, or totally recalled when abuſed or neglected.

If what we undertake is truly moral, and conſonant with His Will, the Great Fountain, from whence we derive our exiſtence, our volition, and our power of exertion; favours the proceſs, and ſucceſs follows the undiſturbed attention.

But it muſt be remembered, that if conſcious rectitude does not form the baſis of our plan, experience will ſoon convince us that we erect an edifice on a ſandy foundation.

We have frequently inſtances of effects being produced by perſons totally ignorant of our ſcience.

Supported for a time by any erroneous theory, certain exertions are called forth, which irritate the nerves of the object, againſt whom they are directed: but ſuch

triflers are ſoon overturned, and want of ſucceſs convinces them that by unſteady and improper dependance, added to want of real knowledge, they are permitted to execute juſt enough to prove that a ſtronger ſupport is within their reach, by which their effects will be as great as their dependance and rectitude.

Here we find the inſignificant power of Sympathetic Powders and Oyntments, ſo voluminouſly extolled by Paracelſus and Digby; the ridiculous Magnetic Poles of Fludd, Gaffarell, and Meſmer; the noſtrum-monger's ſealed letter for the tooth-ache; the candle-ſnuff bolus for the ague; the ſweaty-hand of a dying malefactor for wens; living ſpiders for jaundice; the univerſal abracadabra and triangle: in ſhort, the entire liſt of unmeaning, but infallible ſecrets, which have from generation to generation been preſerved in families, and imparted, under the ſtricteſt tie of ſecrecy, to favourites only, as dying-gifts of ineſtimable value. All theſe well-meaning good people have been buſily employed in exerting the ſame means unknown to each other, or even to themſelves.

But we ſhall find that by relying on the Giver of all

power and knowledge he will enable us to exert a Volition derived from himſelf. That he gives that Power for good purpoſes only, and that it cannot be called forth for bad ones; that ſlight effects may occaſionally be permitted, to prove the exiſtence of that Power: but that improper ones will terminate in elevating the imprudent only to render their fall the more conſpicuous and the more exemplary.

Permit me to intreat you timely to reflect on the very, very momentous Charge you are now undertaking: remember the parable of the Talents, and the fate of the indolent Servant; remember, that from him to whom much is confided, much will be required. That by the myſteries into which you are now initiating, and which are totally unknown to the world, (yourſelves, and your inſtructed brethren excepted) the health, the lives, and the morals of perhaps thouſands of your fellow-creatures will be intruſted to your care; conſequently, and moſt aſſuredly, you will become accountable to the Author of thoſe myſteries for the uſe you make of them.

LECTURE III.

LECTURE III.

I HAVE endeavoured to introduce to your acquaintance the neceſſary Means, or Tools, with which you are to work; and now come to an explanation of the method of employing them.

I obſerved, that every vegetating Form is ſurrounded by an elaſtic atmoſphere, produced from its own circulating fluids; and that the Human Body, which is a compound of ſeveral internal parts, ſends out through its innumerable pores, the particles which conſtitute the atmoſphere of each part, to compoſe the elaſtic atmoſphere of its form.

This curious ſhield of atoms, which takes its ſhape from the form it ſurrounds, continues to encircle the body at a limited diſtance, until ſpiritual influence diſ-

turbs its law, or until a total ceſſation of animal exiſtence deſtroys its texture.

By judicious exertion, this atmoſpherical part of the human body may be attracted from, or diſtended to, any unlimited diſtance; and may be employed to penetrate any other form in nature, ſo that it is capable of contraction, of diſtention, and of direction.

I obſerved, that all vegetating forms continually receive from the eſtabliſhed law of compoſition, atoms for the nutrition of their ſolids; and that thoſe ſolids, in obedience to the law of decompoſition, reject their redundant particles, to blend them with the general atmoſphere of the Earth.

Thoſe rejected Atoms from the fluid, and Emanations from the ſolid, parts of bodies, will demand our ſtricteſt intimacy; rightly underſtood, they will prove to be the only and the unerring criterion by which the obſtructions and diſeaſes of each part can be aſcertained; and judiciouſly employed, they become material inſtruments for the removal of every diſeaſe.

Thoſe Emanations are, as the fluid Atoms, ſubject to the influence of Volition, and may be forced out of their natural courſe, or attracted into the Pores of the operator.

It muſt be underſtood in the moſt extenſive light, that the Human Body, which, in many reſpects, reſembles a ſponge, is adapted to receive ſuch Emanations and Atmoſpheres as a well-inſtructed practitioner may propel into any part of it, and to afford them a free paſſage wherever he cautiouſly and prudently directs them.

I have endeavoured, by borrowed examples from the familiar effects of Light and Sound, to prove the exiſtence of innumerable conductors in the ſtrata of the Earth and of its Atmoſphere, by which all ſimilar parts in nature are attached to each other; and have endeavoured to ſhew, that thoſe connecting Bonds of the univerſe, combine with, and are regular continuations of, thoſe ſimilar conductors, diſtinguiſhed in animate Forms under the title of Nerves.

This un-numbered croud of univerſal Nerves, is equally ſubject to the judiciouſly-exerted influence of

Man's ſpiritual Volition; and whether we conſider them atmoſpherically, or in their employment in animals, they will be univerſally found ſubject to ſpiritual control.

If we action, that is, if we ſtrike, any one or more of theſe conductors with the atoms which are continually deriving from our body, we affect or influence them; that affection is conveyed on to ſuch parts of the body as thoſe conductors are attached to; and the nature and degree of the impulſe will be according to the nature of the Intention and the energy of the Volition.

As every part of the body, as well as of nature in general, is compoſed of particles; and as thoſe particles are materially altered in their qualities by ſuch incidental obſtructions or diſeaſes as may ariſe amongſt them; it is obvious, that the rejected atoms muſt reſemble, in their healthy or diſeaſed qualities, ſuch parts as they proceed from. Thence, healthy parts invariably ſend forth healthy particles, and diſeaſed parts ſend off diſeaſed atoms.

As all Emanations muſt paſs through that atmoſphere

which ſurrounds the form, before they can purſue their courſe into the general one of the Earth; it is evident, that if two porous bodies are placed within each other's atmoſphere, the emanations and atmoſpherical atoms of each muſt be blended and be reciprocally received into each other's pores.

This enables us to conceive, why thoſe who are fearful of infection ſo commonly receive it: Apprehenſion fixes their attention on the particles which proceed from the diſeaſed perſon, and by that means they attract them into their own bodies.

Though the particles which proceed from diſeaſed ſubjects are too minute to be diſcoverable by the naked eye, yet they ſoon become ſenſible to thoſe who receive and are diſpoſed to keep them.

Thus we perceive diſeaſes are communicated through the pores of the body, without being conveyed in the form of vapour into the ſtomach or lungs, as was ſuppoſed. The poroſity of all forms being adapted to receive them as freely as quickſilver paſſes through a ſtrainer.

This diſcovery, rightly attended to, will prove of infinite conſequence to mankind in general; parents will cautiouſly enquire into the health of ſuch nurſes as they confide their infants to, when they reflect, that in that tender age they imbibe many diſeaſes which they are unable to make known but by their cries, and of which they probably communicate the direful influence to futurity, taking the remains with themſelves to the grave.

Convinced of this fact, it would be difficult to perſuade a lying-in woman, or a man ſeverely ill, to accept of the attendance of a nurſe whoſe lungs were diſeaſed, or limbs contracted by rheumatiſm, if they were not well inſtructed in the means of rejecting ſuch poiſonous particles as ſhe may unconſciouſly affect them with.

Thoſe cautions may perhaps appear, at firſt ſight, diſcouraging to the offices of humanity ſo eſſential to the diſeaſed, and ſo flattering to the ſympathiſing heart. But the apprehenſion inſtantly vaniſhes, on reflecting that we poſſeſs, by this invaluable ſcience, the means of alleviating the ſufferings of our fellow-creatures, and of repelling from ourſelves the arrows which we pluck from the wounds of others.

By the doctrine of Pores and Emanations, we conceive why particles of foul water evaporating from newly waſhed apartments, from damp furniture, from marſhes and ſtagnant waters, from decaying animals and vegetables, from freſh painted rooms, and from a variety of ſuch cauſes, produce diſeaſes, to whoſe ſymptoms pompous titles and terrific deſcriptions are ſcientifically given. Reſcued from the errors of phyſic, we merely conduct the noxious atoms out of the body through the neareſt outlet, and the patient is cured.

We are now prepared to conſider the method of ſeeking for, and of removing diſeaſes; but as the execution of this curious proceſs in a great meaſure depends on clearly recollecting the Natural Hiſtory of the Earth, and of its animal Productions; I once more beg leave to recal it to your attention.

RECAPITULATION.

ON looking back at the picture, a Globe appears changing its Solid State into that of Action, re-Action, Heat, and Circulation.

This is rapidly ſucceeded by a prodigious number of Atoms, attracting each other into circular currents, and branching out quite round and through the entire Globe in every direction.

Scarcely has the eye indulged in this curious proceſs, before it diſcovers numberleſs Atoms getting together into ſmall heaps, and moulding themſelves into Forms of various ſhapes and ſizes, all which are penetrated by, or ſtrung as it were on, the circular currents.

Attentively conſidering thoſe warty appearances, we ſoon perceive them ſurrounded by what was, before, an inviſible part of themſelves, collected from their Form and ſhaped like their figure. From this vapour of Atoms we again perceive particles detaching and continually flying upwards into the general ſpace.

This ſurrounding ſhadow, as well as the particles which are detached from it, appear at firſt ſight to be perfectly ſimple, and compoſed of Atoms of one kind only; but on a cloſer inveſtigation, it changes its aſpect, and ſhews Atoms of various kinds and of different colours.

The eye of critical obſervance becomes too ſtrongly attached to this new phenomenon to paſs it haſtily over, and new lights ſhine forth to gratify the purſuit.

Clouds of fluid Atoms, varying in their colour, ſhape, and ſize, according to the ſtate of their reſpective ſources, ruſh forth from each internal part, and conſpire to render the ſurrounding ſhade as heterogenial in its appearance as it is in its quality.

Theſe are ſucceeded by a ſecond claſs of Atoms, as little homogenial as the former: they fly off from each uncirculating part of the form, and burſting through its pores, penetrate the ſurrounding ſhade, and loſe themſelves in the general medium.

Scarcely has the complex picture attained this ſtate

of perfection, before ſome of its objects begin to moulder into duſt. Coheſion's attractive bonds diſſolve. The curious Form breaks down. The ſeparating Atoms diſperſe to join the general maſs, and leave the unencumbered ſtrings ready to receive and penetrate the next ſucceſſion of accumulated heaps of particles.

Thus Action heats the General Atoms into circulating Forms;

Compoſition and Emanations ſurround them with an Atmoſphere;

Univerſal Bonds attach them to each other;

Obſtruction deſtroys their Regularity;

And Decompoſition ſcatters the Atoms to their parental Earth.

PRACTICAL DIRECTIONS.

HAVING conſidered the mode eſtabliſhed by the great Creating Hand, for the organization of Matter, and the uniformity of thoſe laws by which it is governed: we are to explain the means by which Matter may be rendered inſtrumental in removing ſuch impediments as occaſionally ariſe in every organized Form.

This is divided into two Proceſſes.

The Firſt conſiſts in diſcovering the Nature, Seat, and Conſequences of the Derangement.

The Second, in removing thoſe impediments, and reinſtating the laws in the execution of their allotted purpoſes.

The firſt Proceſs is
Examination;
And the ſecond we call
Treatment.

EXAMINATION.

BY Examination is meant, the method of receiving ſuch Impreſſions from one Form to another, as may enable it with the greateſt accuracy to determine the ſituation, nature, and extent of its Derangements.

To receive this information, recourſe muſt be had to the Atoms which proceed from the examined Form.

Thoſe particles of Matter are ſo immediately ſubject to the influence of combined, ſpiritual, Volition, that the eſtabliſhed ſyſtem by which they are mixed with the univerſal medium, gives way during our exertion, and permits both Solids and Fluids to follow the courſe which we preſcribe for them.

All atmoſpherical and emanating Atoms preſerve the Type, or Nature, of the Parts from which they proceed, as long as they continue unblended with the general Atmoſphere of the Earth; but from that time they become altered in their qualities, according to the Impreſſions they receive, and the Atoms with which they mix.

But their Type continues unaltered whilſt we exert our influence over them; ſo that whatever may be the direction or medium through which we propel them, they remain unalterably the ſame, and continue to be paſſive and unchanged either by diſtance, direction, or contact, until we withdraw that influence, and diſcharge them from our ſervice.

It is neceſſary to recollect, that thoſe Atoms were portions of the very Parts from whence they were rejected, and conſequently, that they are exactly of the ſame nature of thoſe Parts.

Now, as healthy and diſeaſed Atoms differ in their ſhape and colour, and differently influence the Nerves with which they come in contact; the Impreſſions produced on ſuch nerves as are permitted to receive them, will vary according to the nature of their deviation from health, or the degree of their diſeaſe.

The Atoms which conſtitute the Atmoſphere of the Form, indicate the ſtate of the Fluids; and
The Emanations declare that of the Solids.

Thus, thoſe emanating Particles are the immediate inſtruments for the conveyance of Impreſſions, and may be attracted, repelled, or directed, by the combined Power of vigorouſly and unremittingly exerted Attention, Intention, and Volition.

To judge of the ſtate of the Part from whence theſe Atoms proceed, they muſt be attracted to ſome part of the Examiner's Body, and muſt ſtrike his Nerves. Hence the proceſs is called an Examination, and the effect produced on the Examiner, we name, Receiving Impreſſions, or Senſations from the Patient.

From inattention to the meaning of the expreſſion, the proceſs has unfortunately been ſometimes called, "Taking the Perſon's Senſations;" by which food has been afforded for Ridicule: this could not have happened, had it been recollected, that we do not by our Examination deprive the perſon of his Senſations, but receive in our own perſons ſuch Impreſſions as his diſeaſed particles communicate to us.

As the moſt ſteady and fixed Attention is neceſſary to attract the Atoms, ſo the leaſt Inattention will not only

diſturb, but totally overturn the Examination, and the Impreſſions will be either totally loſt, or received in ſo confuſed a manner, as to render it impoſſible to acquire any juſt idea of what is ſo very material. Thus, the want of Attention will either produce falſe Impreſſions, lead the Examiner aſtray, or totally pervert the intended purpoſe.

Every ſubſtance in Nature will afford ſome Impreſſion to that part of his Body which the experienced Examiner oppoſes to receive it: but the Hands, and eſpecially the Fingers, are thoſe which for greater convenience we generally prefer.

The roots of the Nails moſt commonly announce the firſt Impreſſions, becauſe the cuticle is thinneſt in that part, and the pungent Emanations more readily arrive at the delicate nerves. A Cut, or a Sore, for the ſame reaſon, will ſooneſt receive the Impreſſion.

Thoſe whoſe nervous ſyſtems are delicate, or diſeaſed, or who are, what medical language calls, Irritable, are in general ſooneſt and moſt affected by ſuch Emanations.

As the conſtituent Atoms of each diſeaſed Part become altered in their natures; and as diſeaſes change according to their different ſtages and to their productive cauſes, ſo the Atoms which derive from them in their different ſtages are diſſimilar in their qualities, and in the effects they produce on the Examiner.

By undiſturbed Perſeverance, cloſe Attention to the received Impreſſions, and by ſerious reflection and compariſon of theſe Impreſſions with each other, we gradually acquire the method of judging of the nature of the diſeaſe; and by following the progreſs it has made in the patient's body, we are led on to its utmoſt extent.

The Examination ſhould be carefully made, not only by attending to each particular part of the body, but by dividing and ſub-dividing every part, and then reverting to the proceſs obſerved in its formation, and clearly aſcertaining the part in which the rudiments of obſtruction firſt took place. This requires great attention, but is amply compenſated by an accurate knowledge of the nature and exact ſeat of the diſeaſe.

The inexpert are apt through impatience to deſpair of

ever being able accurately to receive Impreſſions, too haſtily concluding they never ſhall poſſeſs what they can not immediately command.

There appears a natural propenſity in human nature to reſiſt conviction, and that propenſity is exceedingly conſpicuous in the preſent inſtance, in which prejudice oppoſes palpable evidence. Hence the firſt impreſſions, though pungenlty obvious to the initiated ſceptic, are generally attributed to an uneaſy poſition of the hand and arm, or to ſome other foreign cauſe.

The removal of this obſtacle in great meaſure depends on the diſpoſition of the perſon concerned. Thoſe who cannot be prevailed on to reduce the Theory to Practice, and tenaciouſly doubt the poſſibility of ſucceeding, becauſe they can not feel Impreſſions at their firſt eſſay, are very unlikely to arrive at any degree of perfection in an employment, which depends ſo much on Humility, Perſeverance, and Reſignation.

By frequent repetitions and ſcrupulous exactneſs in attending to the firſt Impreſſions, they will be ſoon followed by others, and each will grow into accuracy.

If we examine a patient for a few ſucceſſive days, without any curative intention, we ſhall each time receive ſimilar impreſſions without alteration. But from the firſt curative Treatment they become changed, and are never after the ſame, even though we ſhould deſiſt from every curative proceſs, and abandon the diſeaſe to itſelf. This, if proofs were neceſſary, is a ſtrong one of the efficacy of the Science.

No part perhaps of this aſtoniſhing Science creates more jealouſy among ſtudents than their ſuſceptibility of ſenſations. Some enjoy that privilege to a great degree of accuracy, even at the firſt eſſay, whilſt others are in purſuit of them for months. This difference is at firſt conſtitutional. But when the Science has produced a proper influence on the mind and morals, the Impreſſions inſenſibly grow into Accuracy. It ſometimes happens that thoſe who were moſt ſuſceptible, become totally deprived of that bleſſing, until they approve themſelves more worthy ſervants.

MODE OF EXAMINATION.

THERE are Two general methods of receiving Impreſſions, or of diſpoſing the Examiner to receive them.

The Firſt is, by oppoſing one, or both Hands.

The Second, by oppoſing the entire Body to that of the Examined.

The Firſt is that mode which ſhould be accurately attended to by newly-initiated Students, as it affords a Catalogue of Senſations, which become a regular Standard to judge of all diſeaſes by, and to reduce Examination to accuracy and perfection.

This Mode of Examination conſiſts in oppoſing one or both Hands towards the Patient. The Examiner ſhould ſit or ſtand in an eaſy poſition, cautiouſly avoiding all preſſure on his body or arms, leſt that ſhould afford him an excuſe for ſuſpecting the Impreſſions to proceed from that cauſe, rather than from the diſeaſe.

The Examiner ſhould fix on ſome particular part

of the Patient's external or internal Form: then, turning the Backs of his hands, with the fingers a little bent, he muſt vigorouſly and ſteadily command the Emanations and Atmoſphere, which derive from that part, to ſtrike his Hands, and muſt cloſely attend to whatever Impreſſions are produced on them.

It is ſcarcely neceſſary to ſay, that the more Compoſed and Attentive the Examiner is, the more accurate will be the reſult of his Examination.

During this proceſs, he muſt not permit his Attention to wander from the Object; if he ſhould, his labour is entirely loſt, and he muſt begin anew, or relinquiſh his purpoſe.

To render the proceſs the more ſteady, the Eyes of the Examiner ſhould be fixed on the part he attends to, with the unvaried intent of directing the Atoms which derive from it towards his Hands, which muſt be as ready to catch, as he is to account for the earlieſt Impreſſions. It may be naturally ſuppoſed that the Eyes of the Examiner ſhould be open, but it is better they were ſhut, as all foreign objects are by that means ex-

cluded, and the porosity of the eye-lids removes the idea of impediment.

The Examiner ſhould never be haſty in delivering his opinion, but ſhould repeatedly examine the ſame part, and deliver his deciſion when he has found the Senſations uniformly ſimilar after ſeveral trials.

The Impreſſions made on different Examiners by the ſame diſeaſe, will be uniformly the ſame when they become adepts.

It is eſſentially neceſſary to render the proceſs of receiving the Atoms detached from every object familiar to us. This will be effected by habitually ſeeking for them. For this purpoſe Students ſhould frequently receive the emanations from ſalt, ſugar, water, fire, and in ſhort, from every occurring ſubſtance; by which means they ſoon become expert.

As the Impreſſion produced on the Examiner by ſuch emanations as he attracts from diſeaſe, will frequently give him ſome ſlight pain, more eſpecially if he has himſelf obſtructions: thoſe who are ready to

graſp at any excuſe to wound the Science, may very probably hold that up to excuſe themſelves, or to deter others from their duty: but thoſe who venture to look beyond the ſurface, perceive the great advantage which muſt derive to the Examiner, if he ſhould be obſtructed, ſince thoſe very emanations which cauſe him pain will detach ſome of his diſeaſe, and by frequent repetition will effectually remove the whole. Thoſe who receive ſuch pungent Impreſſions, and are not themſelves diſeaſed, can not have any apprehenſions, becauſe ſuch emanations never create diſeaſe in the Operator; and all properly-inſtructed perſons have it in their power to remove them from themſelves as ſoon as they pleaſe.

If in examining a delicate, or what is called a nervous ſubject, an apparent Inſenſibility, or Coma, ſhould come on, it will be neceſſary to recollect, that there is no cauſe for alarm, and that it is only a little affection of the nerves, which we have in our power at all times to remove. If the Operator appears to be confuſed on the occaſion, Spectators will take the alarm, and fly for Medical Interference. By this means, the Operator's want of preſence of mind will diſgrace both the Science and himſelf.

It is perfectly immaterial what may be the diſtance between the Examiner and the Examined. The proceſs and the Impreſſions will be exactly the ſame, provided he calls forth in himſelf the requiſite exertion.

As the purport of an examination is in itſelf, and in its conſequences, of a very ſerious nature; and as the accuracy of its performance depends on the moſt tranquil reflection; we ſhould diſcountenance every kind of jocularity and diſturbance; reflecting how far ſuperior in every reſpect our proceſs is to that of a Medical Practitioner, employed for the ſame purpoſe. It would be deemed impolite and inſulting to diſturb any man in ſo ſerious an occupation, and our proceſs, which is far more ſerious, demands ſtill more reſpect.

When farther advanced in our ſubject, we ſhall find that the nerves of delicate habits in particular, are ſubject to the leaſt Impreſſion. It will be neceſſary to be very cautious in examining ſuch conſtitutions; a word or a look may produce ſpaſm or convulſion, by which our proceſs would become totally overturned.

An Examiner is naturally led to place his chair as near

that of the patient as he conveniently can, and to ſeat himſelf immediately oppoſite to him. This is frequently attended with very aukward circumſtances. If the patient ſhould be an enemy to, or an unbeliever in, the Science, and either ſhould not feel effects after a long continuance of Treatment, or ſhould critically examine the aſſiſtant's attitudes, or perhaps graceleſs motions which his anxiety may induce; it is eaſy to conceive how far ſuch a ſituation muſt tend to put him out of countenance. I therefore adviſe every young practitioner to recollect, that it is perfectly indifferent whether he faces his patient or not; and that direction and diſtance are in every ſenſe of the word immaterial, provided the Attention is properly fixed on the object; and that he rightly and clearly underſtands the human body, and the proceſs to be purſued for examining it.

SECOND MODE OF EXAMINATION.

In the ſecond Mode of Examination, the Operator muſt not ſeek to know where the patient is; but recollecting that all human beings are connected to each other by innumerable atmoſpherical nerves, and that the entire medium in which they are placed is compoſed of looſe atoms, he muſt fix his attention on the object, as if he ſtood before him.

Thus ſituated, the Examiner muſt vigorouſly exert his power to attract the entire atmoſphere and emanations from the patient to himſelf.

By this means, the atoms which derive from each particular part of the Examined, run to the parts of the ſame denomination in the Examiner; and thoſe particles which are diſeaſed produce impreſſions on the ſame parts in the Examiner as they do when attracted to his hand. Thus he feels in every part of his own perſon, whatever the patient feels in his; only in a leſs degree in general, but always ſufficiently, to enable him to deſcribe the feelings of the patient, and clearly to aſcertain the very

ſpot in which it exiſts, and the conſequences deriving from it.

If the Examiner's attention is carried only on one particular viſcus in the patient, that ſame viſcus only will receive information in himſelf. But if it be rendered general, every part of his body will give an account of its own proceedings.

But it is to be obſerved, that undiſeaſed parts will not convey any remarkable Impreſſion to the Examiner; as nothing reſults from health, but gentle, equable, ſoft heat.

In every examination the parts which produce Impreſſions on the Examiner are to be duly conſidered; the manner of their formation recollected; and the kind of Treatment they demand is to be clearly made out before any curative proceſs can be commenced.

TREATMENT.

By the term Treating, is meant a proceſs made uſe of by the Operator to create, if partially obliterated, or to encreaſe, if become languid, the natural action and reaction in any part of the body; and to aſſiſt Nature, by imitating and re-eſtabliſhing her own laws, when ſhe is become inadequate to the taſk.

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The Examination being judiciouſly made, and an obſtruction or diſeaſe diſcovered in ſome part of the body, it is obvious that ſome of the pores or veſſels are ſtopped up; that the fluids and general atmoſphere are denied a free circulation through that part, and conſequently that it is verging on, or making rapid ſtrides towards, a ſtate of Inaction, the leading ſtep to complete vegetable Decompoſition.

Here it becomes neceſſary to recollect that the ſolids and fluids ſend forth continually Atoms and Emanations, and that all thoſe particles are ſubject to the influence of Volition.

The preſent proceſs is the oppoſite to the laſt; in that the Examiner attracted the atoms from the patient to himſelf; but in this he muſt force his atoms againſt the patient.

By a ſteady exertion of Compound Volition, we have it in our power to propel the particles which emanate from our own body into and againſt whatever part of any other form we fix our attention on, and can force them in any direction, and to any diſtance.

Thus, by a continual and regular ſucceſſion of particles, directed vigorouſly in a rapid ſtream againſt thoſe atoms which are ſtopped in their paſſage, and accumulated into a heap, we break down the impediment, puſh off thoſe atoms which we detach, direct them into the circulating currents for evacuation, and reſcue the ſyſtem from its impeded functions.

This proceſs may, in ſome ſort, be ſaid to reſemble that of continuing to throw handsful of ſhot at a heap of ſand, accumulated in a rivulet, which, as the grains of ſand become ſeparated from each other, waſhes them

along before it; as all obſtructions are not equally hard or compact, they are not all deſtroyed with the ſame facility, nor equally ſoon. A ſingle look will often prove ſufficient for a recent accumulation of particles, for an accidental contraction, or for a ſudden diſtention; whereas thoſe of long ſtanding, and of a more ſerious nature, demand frequent, long, and judiciouſly-varied Treatment.

The general proceſs of Treatment, is an influence of Spirit, or Mind, over organized matter; in which proceſs unorganized matter is the occaſional inſtrument. The Mind ſhould be able to perform this work without any particular motions of the Body, or of its extremities. But inexperience, and the frequent diſturbances which occur to divert the attention, induce us to adopt ſome mode of action, whoſe conſtant repetition may attach, rouſe, or recall the mind to the ſubject, when it becomes languid or diverted from its employment.

Hence, we generally employ our Hands in the act of Treating, and write as it were, our various intentions on each part by the motions we make towards it; or, in fact, we trace on the diſeaſed part with our current of

emanations, the various curative intentions of our Mind or Spirit.

By this means the diverted attention is continually recalled, and the atoms which flow through the pores of the hands and fingers, as well as through every part of the body, penetrate the patient's pores in conſtant currents of particles, and arrive at, act on, and affect ſuch internal and external parts, and in ſuch manner and degree as the judicious Practitioner determines, whilſt the general connecting bonds of atmoſpherical nerves, partaking alſo of the influence, contribute to ſupport this ſalutary influence and render it irreſiſtibly powerful ſo long only as the aſſiſtant perſiſts in vigorous exertion.

As every part of the human body is attached to a ſimilar part of the ſame denomination in every other human Being by the general connecting medium, and conſequently, as every form muſt receive an impulſe when any one of thoſe nerves is acted on; it is eaſily conceiveable, why thoſe who frequently treat patients and are themſelves diſeaſed, become imperceptibly cured.

It may naturally be aſked, Why this univerſal influence does not cure every diſeaſed perſon, at one and the ſame time, ſince all human forms are thus connected to each other? The anſwer is obvious; The ſingle impulſe which is thus indirectly carried on the general claſs of beings, falls vaſtly ſhort of the complex effects directly exerted on the patient by the Operator; in the laſt caſe, the patient receives the combined and vigorous influence of the Operator's Attention, Intention, and Volition, over the atmoſphere, emanations, and general nerves. Whereas, in the firſt caſe, the general nerves only receive the Impreſſion, and re-action the aſſiſtant.

Thoſe who are ignorant of our Science, conclude the pain they feel on ſuch occaſions to be the effect of diſeaſe, and not an effort for cure, and employ, though unknown to themſelves, the neceſſary exertions to remove the ſalutary efforts, and thus perpetuate their own diſeaſe.

This univerſal bond of attachment, and the influence which is eſtabliſhed by it, appears very plainly in the Attendants of thoſe who are admitted for cure at

public Treatments: they acquire confidence in the Science by witneſſing the cures and effects continually produced, and frequently find themſelves imperceptibly cured of diſeaſes they had not mentioned, and without being attended to directly by any Operator.

In the proceſs of Treating, the Intention muſt be literally curative, and ſtrictly executed, according to the Inſtructions which are appropriated to the nature of each particular part and ſtage of diſeaſe: the atoms which are detached by the Treatment generally announce their expulſion by ſome of the evacuations, or perhaps by ſpaſmodic, convulſive, or ſome other affection of the nervous ſyſtem.

Some of theſe marked effects have been unfortunately graſped at as inſtruments for Impoſition; Stupor or Coma, in particular, have been called Criſis, and have been received as proofs of the knowledge of thoſe who accidentally produce them; whereas ſuch effects are merely the reſult of preſſure on the brain, which the moſt ignorant may at all times induce on ſuſceptible ſubjects, without being able to conceive how an event

took place, which in reality we ſhould find it difficult to prevent in ſome ſubjects.

Every century has, I ſuppoſe, produced examples of men, who from ſuch accidental production of marked effects, have induſtriouſly ſet up ſome Theoretical Syſtem, to account for ſuch apparently miraculous phenomena. Hence the erroneous idea of Animal Magnetiſm, or a Univerſal Fluid pervading all bodies, and particularly affecting animals, as the loadſtone does iron.

Thus it appears that every human Being poſſeſſes the power of ſtriking other forms with the particles which are flying off from his own body; or, to ſtate it in its proper light, we muſt ſay, that it is the prerogative of Spirit in man, by vigorous exertions, to propel the atoms of its own body againſt and through the pores of any other form in nature. But to hazard ſuch an exertion, without being properly inſtructed, and aware of the conſequences, is as imprudent as it would be to take a draught out of the firſt bottle which preſented itſelf in an Apothecary's ſhop. It muſt be confeſſed, that there is a bare poſſibility of its not proving immediately deſtructive,

but I muſt ſuppoſe it difficult to perſuade any one to try the experiment.

No man will be hardy enough to advance, that the Almighty Wiſdom annexed this ſuperlative power to his creatures in vain, or to remain latent and unemployed. Indeed, the ſhortneſs of the date, ſince medical Practice firſt made its appearance in the world, would of itſelf overturn ſuch an idea.

Parental Affection was the family phyſician, and the Upright Mind ſupplied the neceſſary doſe, until new diſeaſes, uſhered in by depravity, robbed the perverted Spirit of its nature, of its dependance on its Maker, and on the means which He kindly impreſſed it with, for protection and for cure: thus eſtranged from Virtue, Sin gave Phyſic, and Phyſic too often gave Death.

Bereft of his natural ſheet-anchor, the afflicted Sufferer graſps at Medicine as a drowning man does at a ſtraw; and reflection arrives too late to tell him, that if medicine could cure, its ingredient muſt be violent; and if violent, deſtruction of the Stomach, Nerves, and Pores, muſt follow: that if any mixture could be really

compoſed of inoffenſive ingredients, it could not poſſeſs any virtue, and conſequently muſt be uſeleſs and inefficacious.

As every Spectator muſt ridicule the phyſician who writes a recipe, or orders bleeding and bliſters for a patient, before he has enquired into the nature of his diſeaſe; ſo, a Practitioner in this Science muſt render himſelf ridiculous in the extreme, who begins to move his hands, or treats a patient, before deliberate examination or enquiry has enabled him to form in his mind the judicious proceſs for cure: he muſt ſtand ſelf-condemned when he reflects, that every intentional motion muſt produce an effect, and that there is no ſuch thing as indifference in this Science, either in the preſcription, or in the mode of adminiſtration.

The nature of the caſe being aſcertained, the primary Cauſe diſcovered, and the judicious mode of Treatment for its removal ſelected, we muſt combine ſteady Attention and regular Intention to active Volition, and by concentrating the whole Soul on the object, we ſhall force the general laws of Action and re-Action into obedience; and in a longer or ſhorter time,

according to the nature and degree of the obſtruction, but more eſpecially, according to the Singleneſs of our Heart, we ſhall produce the wiſhed-for purpoſe.

You now form to yourſelves an idea of the neceſſary means for aſcertaining the ſeat and the nature of each occurring Diſeaſe, as well as the general mode by which they are to be removed.

The firſt of theſe proceſſes I have called,
Examination;
The laſt I have named,
Treating.

This prepares us to conſider, ſeparately and deſcriptively, the Impreſſions or Senſations, which reſult from and indicate each Diſeaſe.

But let us once more endeavour, by Recapitulation, to fix in the mind the ſubſtance of what has been advanced.

RECAPITULATION.

ALL Forms ſend forth Atoms.

Fluids throw off Atmoſpheres of atoms.

Solids throw off Emanations of atoms.

Atoms indicate the Diſeaſes of their Source.

Atoms are attracted and repelled by Volition.

Volition is Spirit, and preſides over atoms.

Atoms, attracted to Nerves, produce Senſations.

Nerves are Atmoſpherical and Animal.

Animal Nerves are the Medium of Senſation, and Inſtruments of Volition.

Atmoſpherical Nerves are the Bonds of Forms, and the Meſſengers of Impreſſions.

Atoms propelled againſt Obſtruction deſtroy Diſeaſe.

Diſeaſe is incipient Solidity and Obſtruction of Atoms.

Solidity is Action deſtroyed.

Obſtruction deſtroyed is Solidity prevented, and Health re-eſtabliſhed.

Solidity prevented is Animal Life.

All diſeaſes produce their own peculiar Senſations.

Diſeaſes are Simple and Complex.

Simple diſeaſe is Obſtruction.

Complex diſeaſe is accumulated Obſtruction.

Every Diſeaſe has its own peculiar Mode of Treatment.

Treatment is a Spiritual proceſs. And

Manugeſtions are the Index to Intention.

LECTURE IV.

LECTURE IV.

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I Endeavoured in our laſt converſation to lead you into the method of examining a patient, or to aſcertain the ſeat of diſeaſe in the human Body.

Our next object is to diſtinguiſh the nature of the diſcovered derangement, and to point out the means which are to be exerted for its removal.

It is neceſſary to repeat, that in every ſubject the nerves are the medium of ſenſibility, but they are not equally ſuſceptible of impreſſions in every ſubject; in ſome they are ſtrong and elaſtic, in others they are weak and lax.

It is impoſſible for the nervous ſyſtem to continue unaffected when the body labours under diſeaſe of any

kind: but when diſeaſe ariſes in a ſubject whoſe nerves are in-elaſtic, the ſymptoms are aggravated, and the effect ſtrongly marked.

Every nerve has a tendency to recover its natural ſtate; but when relaxed beyond the power of re-inſtating itſelf, it is declared to have loſt its tone, or contractile power; in which caſe it neither re-acts nor reſiſts the formation of obſtruction.

Nerves in general are alſo ſubject to the oppoſite extreme, and the nerves ſo affected recoil or curl up, and the muſcles and extremities to which they are connected are irregularly pulled out of their natural attitudes, taking the name of Spaſm, and a ſtill greater degree of contraction receives the title of Convulſion.

When it is our object to relieve or remove ſuch effects, we muſt recollect that the pores are immediate avenues to every part of the Body, and that no internal part is deſtitute of nerves.

The Operator's own emanations, when duly influenced, become, for the Operator, inviſible fingers,

which penetrate the pores, and may be truly conſidered as the natural and only ingredients which are or can be adapted to the removal of nervous, or of any other affections of the body.

By placing theſe inviſible fingers, or ſtreams of atoms, as if they were fingers, on the contracted and curled-up nerves, and by ſtriping down, or laying ſmooth their irritated inequalities, the ſpaſms or convulſions diſappear.

And by actioning and ſupporting the relaxed diſtended nerves, they become ſtimulated into contraction, and are ſupported up to tone.

But it muſt not be forgotten, that thoſe operations are not to be performed at random, as an injudicious adminiſtration of the exertion would induce a tranſit from one extreme to the other: relaxation actioned into curling, degenerates into ſpaſm or convulſion; and convulſive curling over-diſtended, ſinks into fainting relaxation.

Practice, attention, and cloſe obſervance of inſtructions will ſoon enable the proficient thus critically to raiſe, or lower the ſpring of animal life.

PATHOLOGY.

THE neceſſity for clearly aſcertaining the nature and ſeat of the diſeaſe, before we attempt to operate, can not be too ſtrongly inſiſted on: inattention to this eſſential caution will lead the unwary practitioner into the unwarrantable error of attacking ſymptoms for cauſes, and diſgracing the Science by leaving the root continually to throw up freſh branches, until it is completely eradicated.

The Schools of Phyſic lay conſiderable ſtreſs on Pathology, or certain appearances in the patient, by which they ſuppoſe the nature, the ſtage, and the reſult of each Diſeaſe may be pointed out. Thoſe criterions are to be ſought after in the Eyes, the Noſe, the Skin, the Tongue, the Pulſe, and the Geſtures.

That thoſe particular deviations from the patient's natural appearance, during health, do appear frequently, is moſt true; but the major part of them are fallacious and inconcluſive, becauſe they are often produced by oppoſite cauſes.

For example:

Fear, Grief, Anxiety.
Cold.
Putrid, or infectious Matter.
Undigeſted Food in the Stomach.
Fæces in the Inteſtines.
Change of Climate, or of Cuſtoms.
Rheumatiſm.
Gravel, Stone.
Flatulence; and ſeveral other cauſes,

Will produce the following ſymptoms:

Langour, Wearineſs, Weakneſs.
Inſenſibility of the Extremities.
Cold and Trembling; Pain in the Back.
Shuddering and Horror; Paleneſs, Thirſt.
Dry foul Tongue; Coſtiveneſs, or Purging.
Turbid Urine.
Small or ſtrong Pulſe, ſometimes intermitting.
Pain in the Limbs, Joints, and Forehead.
Oppreſſion, Sinking.
Loſs of Appetite.
Nauſea, and ſometimes Vomiting.

Now, as Bleeding, Evacuants, and the other medical

Weapons can not with equal propriety be made uſe of indiſcriminately for ſuch a number of different and oppoſite cauſes producing ſimilar effects; ſuppoſing even for a moment that any of them were applicable; how hazardous muſt it be for the life or conſtitution of the patient, to adminiſter any, until the real cauſe of the ſymptoms can be to a certainty aſcertained, and that ſuch information can not reſult from any obſervance of the ſymptoms, muſt, I flatter myſelf, admit of no ambiguity.

The Eyes and Countenance not unfrequently diſcover very conſiderable alteration from a very ſlight derangement; and yet, at other times and in other ſubjects, no change from their natural ſtate appears, even from very ſerious diſeaſe.

The Tongue becomes dry, parched, dark, red, clammy, or ulcerated, according to the ſtate of the ſtomach, lungs, trachea, or œſophagus; but ſtill we are left in the dark, until we detect the cauſe, perhaps in the kidneys, the meſentery, the liver, or perhaps trace it to worms, ſcrophula, wind, or ſome ſuch remote cauſe.

The ſurface of the body affords us as little certainty

to judge from, as it takes its roughneſs, clammyneſs, heat, or cold, from almoſt every derangement of the habit, or of the circulations.

But the Pulſe proves, of all others, the leaſt to be relied on: all its variations, from ſtrength and regularity, depend on ſuch impreſſions as the nerves may receive from innumerable cauſes, and communicate them to the heart and arteries: joy, ſorrow, flatulence, and all the paſſions, ſo powerfully influence this ſenſible part of the body, as to induce from time to time, in rapid ſucceſſion, every poſſible alteration; and yet, at other times, the nerves are ſtimulated into contraction, and the muſcles and limbs into the moſt alarming agitations, without accelerating or retarding the pulſation of the Arteries, even to one ſingle ſtroke in a minute.

Hence we reject every ſuppoſed aſſiſtance, held out by medical rules for the diſcovery of diſeaſe, and diſentangling ourſelves from the cloſe ſpun web of confuſion, we cultivate the real and unerring means of diſtinguiſhing the cauſes of diſeaſe from the numberleſs ſymptoms they ſo irregularly produce.

SENSATIONS.

I endeavoured in a former Diſcourſe to deſcribe, in general terms, the doctrine of Senſations, and obſerved, that the Operator is to feel in his own perſon ſuch impreſſions as the Patient's diſeaſed emanations produce by ſtriking againſt his nerves. Our preſent buſineſs is to claſs thoſe impreſſions.

Senſations are to be divided into two claſſes.

Thoſe of the firſt claſs derive their emanations from the diſeaſe itſelf.

Thoſe of the ſecond claſs, derive them from the parts which ſurround the diſeaſe.

Thoſe impreſſions which derive from the diſeaſe itſelf are numerous, and vary according to the nature and ſtage of the obſtruction.

The impreſſions which derive from parts ſurrounding the diſeaſe, vary alſo according to the effect which the diſeaſe may produce in them, ſo as, for a time, to be ſymptoms only, but converting by degrees into diſeaſe.

We have an example of this in the caſe of Stone formed in the Kidneys, the urinary Bladder, and in ſeveral other parts of the body. The Stone is the original diſeaſe, and may accumulate to a conſiderable ſize, before ſome ſurrounding parts become either inflamed or excoriated.

All emanations attracted to, or propelled againſt any nerves, muſt produce ſome impreſſion, and that impreſſion will be according to the nature of the emanations which produce it; and as all emanations reſemble the parts from whence they proceed, being in reality the very component atoms of that part, it is evident that the impreſſions they produce muſt be ſuch as the part itſelf is at that time labouring under.

If the examined part is in health, ſo will the emanations which derive from it, and they will carry healthy impreſſions on the nerves of the Examiner; that is, they will communicate ſuch a gentle, natural, uniform heat, as thoſe who are in perfect health feel when they touch each other. But if the examined part ſhould be painful; that is, if the diſeaſed atoms of that part give pain

to its own nerves, ſo it will to the nerves of the Examiner.

If inflammation has produced exceſſive heat, or inactive obſtruction has reduced the part to cold; if excoriation or ulcer has deſtroyed the covering, and expoſed the tender extremities of the nervous ſyſtem to painful contact of the emanating particles; or, if a hard, inſenſible cruſt deprives them of ſenſibility, ſimilar impreſſions will be communicated to the nerves of the Examiner.

But to aſcertain the nature of any diſeaſe, or the exact ſituation of any obſtruction, it is indiſpenſably neceſſary to be perfectly acquainted with the impreſſions which each particular diſeaſe produces.

This I ſhall endeavour to explain.

STONE AND GRAVEL.

Our firſt object is Stone.

By Stone is underſtood, the accumulation of particles of ſand adhering to each other by a glutinous ſubſtance, and forming a maſs of an irregular figure and an indeterminate ſize.

If particles of ſand, ſo attached, form ſeveral ſmall heaps, we call it Gravel.

But when they form one or more large maſſes, they take the name of Stone.

Stone, or Gravel, may be formed in any part of the ſyſtem, becauſe particles of ſand are at all times taken into the body, and are waſhed on by the circulating fluids, until they find their way out of the form by ſome of its outlets. But obſtruction of any kind, whether permanent or tranſitory, ſubjects thoſe atoms to ſtoppage; and the adheſion of a ſucceſſion of them to that which firſt became obſtructed, forms a maſs of too great ſize for the general conductors to admit its circulation.

The moſt frequent ſeats of ſuch accumulations, are the Kidneys, the Ureters, and the Gall and Urinary-Bladders.

When Stone is formed, it is an extraneous or foreign ſubſtance, engendered in that part of the body, but it does not conſtitute any part of the Body: it is deſtitute of action and of circulation, conſequently it has no innate heat, but continually emanates atoms from its ſubſtance, which atoms paſs out through the pores of the body and through its general atmoſphere.

Thoſe emanations, when attracted to the Examiner, muſt affect and hurt ſuch nerves as they ſtrike againſt, and that affection duly attended to and conſidered, proves the criterion by which the exiſtence of Stone in that part of the body may be aſcertained.

SENSATION PRODUCED FROM STONE.

The impreſſions produced by Stone on the hand and fingers of the Examiner will be

Heavineſs, Indolence, and Cold:

And theſe impreſſions are uniformly the ſame, over the entire extent of the Stone, from centre to circumference in every direction.

But when we have paſſed the bounds of the Stone, the impreſſions immediately alter, becauſe we no longer receive emanations from the Stone, but from the parts which ſurround or contain it.

Suppoſe the Stone to be ſituated in the urinary bladder; when we get beyond the bounds of the Stone, we receive emanations from the Bladder, and the impreſſions muſt then be according to the healthy or diſeaſed ſtate of that viſcus.

If the Stone has not cauſed inflammation, or any other morbid affection in the bladder, we muſt receive the impreſſions of health; which are,

An Equable,
Soft,
Gentle,
Natural,
} Heat.

But if the irritating ſurface of the Stone has induced
Inflammation,
Pus, or Matter,
Scirrhus, or
Mortification;
the impreſſions muſt be ſuch as thoſe different ſtages communicate.

CURE OF STONE.

To remove the heap of ſand, thus accumulated into Stone, it muſt be again reduced to ſand, or to very fine gravel. The connecting bond, which, during health, had been one of the natural humours of the body, muſt be again attenuated by mixing its thick and gummy atoms with other more fluid ones of the ſame nature, and the ſtone muſt then be cruſhed into powder.

This operation calls forth a recollection, and an exertion of the practical rules, which I have endeavoured to explain; and comprehends, by its complexity, ſeveral of the different modes of Action or Treatment.

In the firſt place, the rules for examination muſt have been judiciouſly exerted to aſcertain the ſituation and ſize of the Stone, and to judge of the injuries which the ſurrounding parts may have ſuſtained from it.

In the ſecond place, our inviſible Power muſt be applied to the juices which circulate in the vicinity of the Stone: they muſt be conducted to the Stone and

immediately applied to its ſurface, ſo that the Stone muſt be ſoaked in that fluid for the purpoſe of diſſolving the gum which ſticks the particles of ſand to each other.

If the hands are employed in this proceſs, the mind muſt conceive, that the ſtreams of atoms which continually ruſh forth from the fingers, are continued on, and lengthened out into, long inviſible fingers, which become continuations of our viſible ones; and which, being compoſed of minute particles, are perfectly adapted to paſs through the pores of another form, and to be applied as we ſhould our viſible fingers to the very part on which it is intended to act.

The third proceſs, is Action, by ſtriking thoſe very emanating particles that conſtitute that inviſible part of our form, which it is intended to employ, whether it be the Hand, the Eye, or any other part. By ſtriking them, I ſay, forcibly, and in conſtant and rapid ſucceſſion againſt the Stone, the particles of ſand, which, by ſteeping, are rendered leſs tenacious to each other, detach, and falling again into duſt, are taken up and waſhed out of the body by the natural evacuation.

This caſe of Stone, rightly underſtood, may be conſidered as a material aſſiſtant to the general means of Treating and of Inveſtigating ſeveral other obſtructions.

Let it be an adopted general rule, to reduce mentally every object and effect we meet with into its original ſimple ſtate, and not content ourſelves with the mere idea or name, which habit has accuſtomed us to annex to words or names.

When, for example, the object of our attention is Water, Fire, Vapour, Smoke, Light, Sound, Wood, Glaſs, or any other object, we muſt loſe ſight of its name and follow Water to its component atoms; we ſhall then no longer conſider water as a fluid, but as a number of particles, attracted towards each other; not forming a body of coheſion, but continuing to be detached, yet ſo nearly approached to each other, that human unimproved viſion is unable to draw the line of ſeparation.

We ſhall then conſider Fire to be compoſed of the conſtituent particles of the burning ſubſtance, ſeparated from each other by the intruſion of other particles, and ſtimulated by the exceſs of action and re-action, into exceſſive heat and decompoſition.

BURNS.

This will enable us clearly to comprehend, why any part approached to this burning and decompoſing ſubſtance, becomes painfully affected, we preſently perceive that the heated emanations fly from the decompoſing ſubſtance into our pores, and action the nerves, producing a painful ſenſation; the irritated parts detach ſome of their circulating fluids to waſh off the offending matter; if it ſucceeds, the cauſe being removed, the effects diſappear; but if not, the external or ſcarf ſkin is diſtended into a bladder or bliſter.

The ſame obſervations hold good with reſpect to the effects produced by boiling fluids, if their particles get through the pores, the effects and the conſequences are ſimilar to thoſe produced by burning.

Thus, Burning and Scalding, appear to be ſimilar in their effects, though ariſing from diſſimilar cauſes; one from the admiſſion of atoms in a ſtate of ignition, and the other from the heated particles of water and air.

The impreſſion afforded to the Examiner from Burns and Scalds will be according to the nature of the diſeaſe, and to the length of time elapſed ſince its occurrence.

Immediately after Burning or Scalding, and before inflammation is ſet up, the veſſels of the part are contracted, and benumbed, and circulation is obſtructed,

SENSATION FROM BURNS AND SCALDS.

The impreſſions produced on the Examiner from the entire extent of the benumbed part, will be

Heavy,
Dull,
} Pricking.

But beyond the limits of the Burn, will be found a

Natural,
Equable,
Gentle,
} Heat.

The fluids in circulation ſoon endeavour to force open the obſtructed paſſages, and the oppoſition cauſes inflammation round the circumference of the Burn.

When it is arrived at this ſtage, the ſenſation will be
Great Heat, and
Sharp Pricking,
But Indolent Numbneſs from the centre.

CURE OF BURNS AND SCALDS.

To cure Burns or Scalds in their firſt ſtage, the atoms which were received through the pores in a heated ſtate, muſt be forced out again.

Circulation muſt be re-eſtabliſhed in the contracted veſſels under the Cuticle.

The obſtructed blood muſt be treated back to its circulation.

Fluid muſt be brought to the contracted cuticle, and its pores muſt be opened.

In the ſecond ſtage,

When a quantity of fluid has been ſent to the burned part to waſh off the cauſe, and has ſwelled out the cuticle into a bladder, the pores of the cuticle muſt be forced open, the noxious atoms forced out, and then the water becomes uſeleſs. To encourage the abſorption of this now uſeleſs fluid, action the veſſels under the cuticle.

In all recent caſes, the ſucceſs attendant on judicious and energetic Treatment, is rapid beyond ſanguine expectation.

HEAD-ACHES.

Our attention falls next on Pain in the Head.

Under the title of Head-Ache, we ſhall be led to ſeveral Effects, which derive from one and the ſame ſource.

The Forehead, The Pole,
The Temples, The Neck,
The Scalp, The Face,

are all liable, more eſpecially in relaxed habits, to frequent pain.

Extraneous particles mix with thoſe of the general atmoſphere, and paſs with it through the pores of the Head, as well as through all the other pores of the Body; and when ſtopped in their paſſage through and out of the Form, which will happen either from their ſize or quality; when thus ſtopped, I ſay, they will create pain in thoſe nerves which they unavoidably irritate.

We ſhall find, when we come to conſider this ſubject

more minutely, in the Second Part of the Courſe of Lectures, that it comes under the immediate head of Rheumatiſm. The impreſſions produced by Rheumatic Head-Ache are

Pricking,
Numbneſs,
Creeping.

This Creeping, or vermicular motion, is to be carefully attended to, as it will appear to be eſſential clearly to diſtinguiſh it from another of the ſame kind, but more complex.

Theſe Senſations are ſometimes accompanied with Heat, and at other times with Cold, according to the general health and ſtrength.

If the patient is full, ſtrong, and healthy, the Examiner will receive

Heat,

in conſequence of the inflammation ſet up in the obſtructed part.

But if the patient is of a lax, looſe, habit, the parts, though pained, will ſtill continue indolent, and the ſenſation to the Examiner will be that of

Cold.

This deſcription of Rheumatic Head-Ache holds good, as we ſhall hereafter find, for pain deriving from the ſame cauſe in other parts of the body, but will require a different intention of Treatment, according to its ſituation.

CURE OF RHEUMATIC HEAD-ACHE.

To cure this kind of Head-Ache, the Scalp, or covering of the ſkull, muſt be vigorouſly treated outwards, by placing the inviſible hand on the bare ſkull, under the ſcalp, and with the back of the hand upwards, forcing all the obſtructed particles outwards through the pores, and burſting open all thoſe which may be ſhut up.

Or by a leſs general exertion the extraneous particles may be ſought for, and turned out.

The ſame mode of Treatment holds good for the removal of obſtructed particles from the Face, and the impreſſions produced by them are ſimilar to thoſe derived from the ſcalp.

But when wind, or extraneous particles are obſtructed and deeply ſeated in the Pole, in the Throat, in the Mouth, or in the Glands, the mode of Treatment muſt be judiciouſly adapted to the nature of the caſe.

Particles obſtructed in the Face, that is, about the Eyelids, Temples, Noſe, Cheeks, or Chin, muſt be conducted outwards, and the part muſt be braced.

When confined in the Gums, the Palate, the Tongue, the inſide of the Cheeks, they muſt be treated into the mouth.

Pains in the Teeth, when the tooth is not carious, and the nerve expoſed, are to be conſidered as Rheumatiſm; the extraneous atoms are to be conducted through the tooth, from its ſubſtance and perioſteum, or membranous covering, into the mouth; and then, the tooth, the membrane, its nerve, and blood-veſſels, are to be gently braced.

This leads us to obſtructed particles in the Neck, Pole, and Glands of the Throat; which we ſhall endeavour to purſue in our next converſation.

LECTURE V.

LECTURE V.

LECTURE V.

IN our laſt diſcourſe we took a curſory view of ſuch ſlight obſtructions as occaſionally take place in the Face: we are now to purſue this ſubject further.

The Pole and Neck are, at all times, ſubject to obſtructed particles, which ſhould be attended to and thruſt out as ſoon as poſſible. If the atoms are ſtopped near the external ſurface, they ſhould be thruſt outwards: but if they have been obſtructed nearer to the mouth, or to the trachea, or œſophagus, they muſt be treated inwards to thoſe cavities.

But the Glands of the Neck, and particularly thoſe large ones in the Throat, are the moſt troubleſome, and in many ſubjects, the moſt frequently obſtructed.

DISEASED TONSILS.

The Tonſil Glands, which are peculiarly liable to obſtruction, require ſome attention.

When particles of wind, which ſhould paſs freely through, are ſtopped in theſe glands, their pores become cloſed; they ſwell to conſiderable ſizes; they inflame; matter is formed in them; and an ulcer takes place.

In the firſt ſtage, when obſtructions and uneaſineſs only have ariſen, the cure is ſpeedily effected by burſting open the pores inwards, and then bracing up the diſtended part.

In the ſecond ſtage, when Inflammation is ſet up, but no Abſceſs or Ulcer as yet produced, the pores muſt in the ſame manner be opened, and the offending particles treated inwards: the ſtagnant blood muſt be puſhed on to circulation, and a free paſſage produced for the general atmoſphere.

The conſequence will be, a ſecretion of thin fluid, which will accumulate in the mouth, and the complaint will ſoon diſappear. In this ſtage of the obſtruction, the part muſt be braced with great caution and gentleneſs, leſt the confined blood ſhould not acquire its freedom of circulation: fermentation would then ariſe, and Matter would be the conſequence.

In the third ſtage, when fermentation has produced Pus, and an Abſceſs is actually formed, the Matter muſt be treated inwards, and the remaining part of the gland and integuments melted down as rapidly as poſſible, that it may burſt into an Ulcer; that the pus may be evacuated; and that abſorption may be as much as poſſible prevented.

In the fourth ſtage, when the abſceſs is broken, and an ulcer produced, the engendered pus muſt be conducted from the circumference to the face of the ulcer, and evacuated, that none of the contaminated particles may ſpread from the ulcer to the neighbouring parts and produce freſh diſeaſe.

The ſurface of the ulcer muſt be actioned that

re-action may be ſet up and heat ariſe. This proceſs will invigorate the granulating, or ſprouting, fleſh under the ſore, and will enable it to throw off the ſecretion.

In the fifth ſtage, we have the dreadful appearance of Mortification, which chiefly depends on an aptitude in the conſtitution, or depravity in the juices, ready to receive Putrifaction and to become putrid.

HEAD-ACHE.

This leads us back to the ſubject of Head-Ache.

Pain will ariſe in the Head from accidental preſſure on the nerves of that part; this, while it is recent, is local, or confined to that part only. The nerves in this caſe, curl up and contract, particularly at the Temples.

This kind of Head-Ache gives way immediately by taking off the contraction, which is rarely more than the work of a few minutes.

But a much more ſerious Head-Ache ariſes from diſeaſes, and from habitual injuries done to the ſtomach by undigeſted food; by irritating and ſpirituous liquors; by wind in its coats; and by a long liſt of natural and accidental cauſes, which, by affecting the nerves of the ſtomach, are preſently communicated to the Head.

It would prove a fruitleſs taſk, to treat the Head for the removal of this pain, which is but a ſymptom, and not a diſeaſe. We ſhould, by each Treatment, remove or decreaſe the pain; but whilſt the cauſe continues, the Head-Ache, which is its ſymptom, muſt be for ever re-produced.

Therefore, the whole of the Attention and Treatment muſt be directed to the Stomach, which once freed from its derangement, the affection of the Head preſently ſubſides.

For this purpoſe, the internal cavity and coat of the ſtomach muſt be cleared of ſlime; the inviſible fingers muſt ſcrape, as it were, all the internal ſurface; and we muſt carefully attend to ſuch evacuations as nature may dictate.

If a ſtrong inclination to vomit ſhould come on, direct the ſtuff through the cardia, or left orifice, through which aliment paſſes into the ſtomach: but if a contrary evacuation ſhould be indicated, either by the Operator's impreſſions, or by the Patient's own feelings, it muſt be aſſiſted and not counteracted.

The Senſations produced by this ropy humour in the ſtomach, are

A Thick, Gummy,

feel on the fingers; and when they are gently moved, they meet with a ſlight degree of reſiſtance: if attempted to be bent, the ſkin feels

Stiff, and a little Rigid.

To judge of the depth of the ſlimy humour in the ſtomach, the fingers muſt be perpendicularly dipped in it to the bottom of the ſtomach; the conſequence will be, the impreſſion of a

A Circular Line,

as if a ſtring ſurrounded each finger, marking the depth to which they had ſunk in the ſtuff.

From that Line downwards to the fingers'-ends, they feel Stiff and Rigid:

but above theſe bounds, the fingers and hand have their natural feel.

Thus we perceive, that a Pain in the Head is not a ſufficient indication to guide our operations, but that the cauſe muſt be diſcovered; and that then only we are prepared to afford aſſiſtance.

RHEUMATISM.

Noxious and damp atoms, when obſtructed in their paſſage through the body, or its extremities, produce ſimilar Rheumatic Pains to thoſe deſcribed in the Head and Neck; and are to be brought out in the ſame manner.

It frequently happens, in lax habits particularly, that the Patient feels the particles of diſeaſe, as the Practitioner conducts them, creeping through the cellular membrane, ſubmiſſive to his influence.

Hence a Caution for Practitioners in general, not to hold the hand of a rheumatic Patient's diſeaſed arm; nor to permit Patients, whilſt under Treatment, to place the diſeaſed hand, or limb, on the other hand, on the knee, or on any part of the body; becauſe the particles of diſeaſe will be conducted by the Treatment out of the pores of the Patient, and into thoſe of any other perſon or limb.

It is alſo neceſſary to obſerve, that if ſuch accident

ſhould incautiouſly happen, the diſeaſed atoms ſhould be immediately removed, eſpecially if pain is felt, leſt obſtruction ſhould be produced.

In lax, obſtructed ſubjects, ſevere pain is frequently produced by Wind ſuddenly removing from one part of the cellular membrane to another perhaps very diſtant part of the body. In ſuch ſubjects, Practitioners, by Treatment, diſlodge and conduct the Wind as they pleaſe.

Wind thus pent up in the cellular membrane, announces itſelf to the Examiner by a

Creeping.

This Impreſſion will be produced from Wind confined in any part of the body or extremities, and is in itſelf a perfectly ſimple ſenſation, imitating on the Examiner, the effect which it produces in the Patient, by creeping about from part to part, within the bounds of the obſtruction.

It is neceſſary however, for Practitioners to make this ſenſation clearly out, leſt it ſhould be miſtaken for another Impreſſion which is not ſimple, but com-

pound, and which, in the creeping part, reſembles this :—

When obſtructed Wind has acted on a part which is already diſeaſed, or when it has irritated any part to Inflammation, the Examiner will find the ſenſation no longer ſimple, but complicated with that which proceeds from Inflammation, that is, with

Heat;

which will be more or leſs intenſe, according to the degree of the Inflammation. The action of Wind on the tender nerves of the inflamed part will at the ſame time produce

Pricking.

INFLAMMATION.

The Examiner is to receive from a part which is become inflamed and actioned by confined Wind, a complex impreſſion; that is,

Intenſe Heat,
Pricking, and
Creeping.

The Heat derives from the Inflammation.

The Pricking, from the Wind acting againſt the obſtructed pores.

The Creeping, from the motion of the Wind from one part to another.

The intenſe Heat is chiefly felt under the Nails.

When Inflammation has continued for ſome time, if the efforts of Nature have not been able to ſhake off the cauſe, the fluids confined in the inflamed part ferment, and produce what is called Matter, or Pus.

PUS.

Where Pus is confined, the affected part takes the name of an Abſceſs.

This Matter, or Pus, when examined judiciouſly, communicates to the hand of the Examiner ſuch

Softneſs,

as we ſhould expect from actually dipping the hand in ſuch ſtuff out of the body; but it is, at the ſame time, combined with Pricking, ſo that the ſenſation from Pus becomes

Softneſs, and
Pricking.

The ſenſe of Pricking ariſes from the motion or action which the wind, contained in the Pus, makes by its endeavours to eſcape.

ABSCESS.

Every Abſceſs is a collection of Matter, and every collection of Pus naturally tends to break its way, and eſcape through the neareſt ſurface.

Matter, like every thing elſe in nature, is compoſed of atoms, and we have it in our power to give it what direction we pleaſe.

Every Abſceſs requires to be treated according to the part in which it is ſituated.

If in the Glands of the Throat, it muſt be treated into the Mouth.

If in the Glands of the Neck, it muſt be forced outwards.

If in the Liver, it muſt be directed through the Hepatic Duct into the Duodenum.

If between the Dura and Pia Mater in the Skull, it muſt be brought through the Ears, or Noſe, according to its ſituation.

If in the Kidney, it muſt be conveyed to its Pelvis or Reſervoir, and thence by the Ureter to the Bladder.

In ſhort, Matter muſt, as all humors, be conveyed through the neareſt natural paſſage formed for that purpoſe.

And a general Rule may be laid down, never to encourage or permit an Abſceſs to burſt into the cavity of the Cheſt, of the Belly, or of the Pelvis.

LUNGS.

The Lungs are ſubject to ſeveral different kinds of obſtruction: but that which falls under our preſent obſervance, is the moſt frequent, and often the forerunner of ſerious and fatal conſequences.

From change of weather, from night, and damp air, and from a number of cauſes, a ſecretion from the Lungs becomes hard and tough, or the air-veſſels, by contracting, deny it a paſſage. In this caſe, the Examiner will feel his fingers as if dough, or unbaked bread, had been permitted to dry on them. This I will call

Clumſy Stiffneſs.

CURE OF LUNGS.

To cure this obſtruction, the general atmoſphere muſt be followed in its circulation through the Bronchial or Air-Pipes, beginning at the Trachea, or Wind-Pipe, and purſuing it downwards and backwards, and returning upwards and forwards again to the mouth, by which means Expectoration will be produced, and the obſtructed ſtuff diſengaged from the Air-Pipes.

This deſcription of the Diſeaſe and of its mode of Cure, though far ſhort of what the ſubject demands, will enable the Student to begin, and prepare for what the Second Part will explain at large.

MEDIASTINUM.

In recent colds, as well as in caſes of too long faſting, the Mediaſtinum, or front lining of the cheſt, becomes ſwelled into ſmall bladders containing wind; from which ariſes pain, and a ſenſe of tightneſs or oppreſſion in the act of inſpiration, or drawing in air.

The impreſſion to the Examiner, whilſt the obſtruction continues ſimple, will alſo be ſimple

Creeping:

but if it continues, and produces Inflammation, the ſenſation becomes complex, and

Creeping,
Heat, and
Pricking,

will be found in the part.

CURE OF MEDIASTINUM.

To remove this obſtruction, the pent-up wind muſt be ſet free, by burſting the little bladders which contain it.

It is neceſſary for this purpoſe, to recollect, that there are two directions in which the wind may be expelled when ſet looſe; one, upwards to the mouth; and the other, downwards to the ſtomach.

The ſhorteſt paſſage is upwards to the mouth, which generally ſucceeds, when carefully conducted; but caſes occur, in which it becomes neceſſary to divide the proceſs, and convey one half upwards, and the remainder down, to paſs into the ſtomach and out at the mouth.

PLEURISY.

The general lining of the cheſt is called Pleura, and an affection of that lining is named Pleuriſy, or, Diſeaſe of the Pleura. The ſymptom is acute pain affecting the breath.

The ſenſations which derive from this wind, whilſt pure, is ſtill the ſame, that is,

Creeping,

and when Inflammation takes place, it receives the addition of

Heat, and

Pricking,

and ſo on to the other ſtages.

It is neceſſary in all caſes of wind in the Mediaſtinum, carefully to guard againſt the diſlodged particles making their way from that membrane into the Pleura, elſe we remove one, to produce another painful obſtruction.

CURE OF PLEURISY.

To cure Pleuriſy, the pent-up wind muſt be treated downwards; that is, it muſt be directed to the Diaphraghm, and thence to the Stomach.

The pain ſubſides as ſoon as the wind begins to remove.

The pores of that part of the Pleura muſt then be forced open, to prevent relapſe.

It is to be obſerved, that the rapidity of the Cure will, in great meaſure, depend on the ſtage in which it is undertaken. If it is attacked before Irritation has laſted ſufficiently long to induce Inflammation, the Cure will be ſoon effected: but if Inflammation has already taken place, it will be much more tedious and troubleſome to remove.

DEAFNESS.

When the nerves which are ſent off from the Brain to the Ears have loſt their circulation, the branches which run from them to the Drum, or Tympanum, become thickened and inſenſible, and the Patient is ſaid to be Deaf.

This ſtate of the auditory nerve the Examiner feels by a

Reſiſtance

of the motion of his finger againſt the Tympanum and Nerves, and at the ſame time a degree of

Numbneſs,

leading the hand on to the bounds of the obſtruction; ſo that the ſenſation is

Reſiſtance, and
Numbneſs.

CURE OF DEAFNESS.

The Cure of Deafneſs is often difficult. When the obſtruction is recent, it is ſoon removed; but when of long continuance, the circulation is not only impeded, but frequently obliterated.

When Deafneſs proceeds from wind, which is but another name for Rheumatiſm, the cure depends on its removal.

The Drum of the Ear ſhould, in all caſes, be actioned, and fluid brought to the nerves from the membranes which cover the Brain.

But in every caſe of Deafneſs, the cauſe ſhould be diligently ſought after.

INTERNAL CONTRACTION.

I have already obſerved, in the courſe of theſe converſations, that the nerves recoil or contract, and curl up, when, internally or externally, they meet with any irritating cauſe. Such contractions announce themſelves to the Examiner by a preſſure round his fingers, as if a ſtring was tightly bound round them.

CURE.

To cure ſuch contractions, the inviſible hand muſt be laid on, and muſt gently ſtripe them down.

RELAXATION.

Relaxation of the nerves is the oppoſite to contraction. In one, the nerves are ſhortened; but in the other, they are lengthened out unnaturally, ſo as to be in great meaſure deſtitute of tone, or power of contraction.

In all caſes of relaxed habit, whether general or local, the part examined will produce in the Examiner's hands, fingers, and wriſts, a

Lengthened,
Debilitated

ſenſation, by which the limb is actually weakened.

CURE.

The nerves muſt be ſupported. If the Relaxation be recent, or accidental, attend to the cauſe: if habitual, or conſtitutional, you will relieve, but not cure.

OBSTRUCTION.

I have conſidered all Obſtructions in a general light, and have repreſented them as primary Cauſes of many ſymptoms. This will more clearly appear in that part of our inſtructions which is to ſucceed the outlines. I mention it now, only to depict the impreſſions which the Examiner is to expect from obſtruction of any kind, which will be a

Cold, and yet
Sharp, and
Contracted

feel in the hand and fingers: if wind confined,

Creeping;

but if inflamed, Heat,

in the place of Cold; and if inflamed to a great degree, the fingers' ends and under the nails, feel as if held near a great fire.

CONTINUED PURGING.

Continued Purging will demand great attention. It is not to be conſidered as a cauſe in itſelf, but as an effect, the cauſe of which is diligently to be ſought after.

When humors are, either by the efforts of Nature, or by our imitation and invigoration of her laws, detached from their ſeat of obſtruction, the animal œconomy rejects them from the body by ſome of the natural outlets. If the choſen outlet ſhould be the inteſtinal canal, Purging muſt continue until the whole is evacuated.

If, by weakening Nature, or by any other means, the Purging ſhould be reſtrained before the work is accompliſhed, it is evident that a part of the noxious Matter remains confined, and will be abſorbed, and depoſited in ſome, as yet, undiſeaſed part, which it can not fail of inoculating; and the laſt caſe becomes worſe than the firſt, by ſpreading over the whole body a Diſeaſe which was local.

It is therefore neceſſary, in ſuch caſes, to aſſiſt Nature in the expulſion, and to ſtrengthen the ſyſtem by well-choſen and frequently-repeated nutritious food.

If the patient ſhould appear to be much weakened, ſupport, and gently give tone to the inteſtinal canal, during the intervals of evacuation; aſſiſt the expulſion of the next, and then brace up again.

COSTIVENESS.

In ſuch caſes as may be really deemed Coſtive, the cauſe ſhould be explored, and will generally be traced to one or more of the viſcera, whoſe department it is to furniſh fluid for the aſſiſtance of digeſtion and ſeparation, and for the encouragement of a motion in the inteſtines for the expulſion of the fæces.

Hence, the Stomach, the Liver, the Spleen, the Pancreas, the Meſentery, the Kidneys, the Diaphragm, and the Inteſtines, muſt be all judiciouſly treated, according to their reſpective mode of original formation, and the eſtabliſhed law of their ſecretions.

ABSORPTION.

There is a function, inherent to the animal machine, by which ſuch fluids, whether they be healthy or diſeaſed, as are not to remain in the form, are ſucked up and rejected, and by which the fluids are alſo conveyed from part to part of the body for its nutrition and aſſiſtance: this is called Abſorption.

Vigorous action, carried by our endeavours on a diſeaſed part, detaches ſome of thoſe fluid atoms, and Nature ſets up her work of Abſorption to reject them. Of this the Examiner has a very remarkable notice by the following impreſſion:

I obſerved, that obſtructions gave to the hand of the Examiner a Dry, Stiff feel on the fingers: I am now to obſerve, that when by continued Treatment, ſome particles have been ſtruck off, and Abſorption takes place, the Dryneſs of the fingers diſappears, and they become

Wet and Soft;

the moiſture hangs on the ends of the fingers, and

continues viſibly ſo until the Aſſiſtant alters his mode of Treatment, or quits that part to attend to ſome other; the moiſture then diſappears, and the ſenſations change according to the ſtate of the part then attended to.

This proves a moſt valuable Information, as it encourages the Aſſiſtant vigorouſly to purſue a proceſs which is ſo rapidly leading on to cure.

OBSTRUCTED CELLS.

When parts are obſtructed whoſe texture is cellular, ſuch as the Spleen, or the Ovariæ, and the natural fluid is ſtopped in its circulation; the impreſſion deriving from that part will be a

Spinning

in the fingers' ends, or as if ſomething was twirling about in one or more of them.

CURE.

The part from whence the ſenſation of Spinning proceeds, muſt be ſtrongly actioned; by that means the Cell will be forced open, the Fluid will circulate, and the Spinning will ceaſe.

SCROPHULA

Is an acrid humor which makes its appearance in the glands, ſometimes in the joints, and ſometimes in other parts of the body.

The impreſſion which this Diſeaſe produces on the hands and arms of the Practitioner is curious and extraordinary; the joints of the fingers, wriſts, ſhoulders, and elbows,

Crack

at every motion made by the Operator. The Cracking is ſometimes loud enough to be heard by ſpectators.

CURE.

The Cure muſt depend on the nature of the humor, and the ſource from whence it derives. If it be hereditary, it is rarely curable: if acquired, the Cure muſt depend on the removal of the humor from the habit.

WORMS.

Worm Cafes are of two kinds.

In the firft clafs of cafes, the Worms are loofe in the Stomach or Inteftines.

In the fecond, they are formed and contained in Bags, which are attached to the internal Coat of the Stomach.

In all Worm cafes, the fenfations are to the Examiner's fingers

Creeping, and
Pinching.

CURE.

If the Worms are detached, by actioning them ftrongly they will be puſhed along the Inteſtinal Canal, and evacuated: or, if they are ſituated in the Stomach, they will be forced through the Pylorus, or

rejected by vomiting, as their motion, when irritated by Treatment, will urge the ſtomach to contraction.

If the Worms are contained in bags, the cure depends on breaking or detaching the bags, which are, for the moſt part, cauſed by ſlime, and originate from the uſe of ſubſtances, or drugs, which decreaſe the action of the Stomach, and obſtruct its poroſity.

In Worm caſes, a Cough is generally a concomitant ſymptom. This cough is not Diſeaſe, but is a ſalutary effort of Nature, ſet up to detach the Slime, burſt the Bags, and puſh off the Worms. Conſequently it ſhould be encouraged by actioning the Stomach, and detaching the Slime.

Nutritious food ſhould be ſtrongly inſiſted on, and the ſtomach ſhould never be permitted to become empty of ſolid food.

BRUISES, OR CONTUSIONS.

When a part is bruiſed by a fall or ſtroke, many minute veſſels are ruptured, and a fluid is thrown out from them. This fluid accumulates and becomes ſtagnant in the bruiſed part.

The ſenſations ariſing from this ſtagnant fluid, will be Heavineſs in the Hands,
Numbneſs of the Fingers.

CURE.

The parts which immediately ſurround the fluid, muſt be ſtrongly actioned, until they are ſtimulated to abſorption, and the Operator's fingers become damp or wet.

The entire ſyſtem ſhould alſo be vigorouſly actioned, by which, general circulation will be quickened, and univerſal abſorption encouraged.

LUXATION, OR STRAIN.

In all Strains, the parts are conſiderably ſtretched out, and conſequently relaxed, and blood-veſſels are ſometimes burſt.

If no veſſel is burſt, the caſe is ſimple.
If a blood-veſſel is burſt, it is compound.

If the relaxation continues for a little time, particles of the general atmoſphere paſs into it through the pores, and remain ſtagnant for want of tone or elaſticity in the fibres to puſh them out again: this is literally Rheumatiſm; ſo that this caſe becomes a triple compound of Relaxation, Extravaſation, and Rheumatiſm.

To this we muſt add a fourth caſe, which ſometimes happens, more eſpecially in the ſhoulder-joint; the head of the ſhoulder-bone is forced out of its ſocket, and burſts through a membranous bag which incloſes it.

CURE OF LUXATION OR STRAIN.

Simple Luxation is cured in a few minutes, only by bracing up the relaxed part.

Compounded with Rheumatiſm, it requires more time, according to the degree of the rheumatic affection.

The proceſs is that of firſt removing the extraneous particles, and then bracing the relaxation, and actioning the part, to produce abſorption.

In all caſes it is neceſſary, by manual operation, to reduce the Luxation according to the rules of Surgery; that is, to replace the bones in their natural ſituations.

VOMITING.

It ſometimes happens, that Vomiting or ineffectual efforts to vomit, continue obſtinately to recur.

When any humor is thrown off at each effort, it is evidently a ſalutary proceſs, and ſhould not be reſtrained, but aſſiſted.

But if the retchings are ineffectual, the Examiner ſhould aſcertain the nature of the caſe: if ſlime is attached to the ſtomach, he ſhould ſcrape it off.

But if it proceeds from irritation, cauſed by violent emetics; by an acrid humor, cauſing irregular contractions in the ſtomach; by general debility; or by any ſuch cauſe: the nerves of the ſtomach become ſo irritable or impatient of the ſlighteſt contact, that even the circulating particles of atmoſphere ſtimulate them into ſpaſm and contraction.

CURE OF VOMITING.

The inviſible hands muſt be laid on the internal ſurface of the ſtomach, and the whole muſt be made ſmooth, ſtretching gently out the little contractions and curlings of the delicate nerves.

As this can not be done without diſtending and relaxing the ſtomach a little, it is neceſſary to ſupport and gently to contract the entire viſcus.

By this Treatment the Retching diſappears entirely.

But if an acrid humor has cauſed the Vomiting, it will return until that cauſe is removed.

PERSPIRATION.

If the nature of the caſe ſhould require Perſpiration, the body in general muſt be actioned to quicken circulation, and the diaphragm in particular muſt be attended to.

When, by this means, the internal atmoſpheres of each part are increaſed, the whole muſt be forced vigorouſly outwards, by laying the backs of the inviſible hands againſt the internal ſurface of the cheſt and belly, or thorax and abdomen.

SUSCEPTIBILITY.

Delicate conſtitutions are ſuſceptible of the ſlighteſt derangement, and are called Nervous, or Fanciful. But ſuch ſubjects will be always found to be diſeaſed; ſo that their irritability is only a ſymptom, and not the real Diſeaſe: the nature of the cauſe is frequently ſuch, or the parts in general are ſo relaxed, that a ſufficient degree of pain is not felt by the patient to cauſe complaint, and the practice of phyſic has no certain method of judging without.

Happily, we now want no aſſiſtance from the patient's feelings, as we are enabled by our own, to aſcertain and remove the latent cauſe.

CONCLUSION.

Infanity, and the Diſeaſes of Infants, are no longer beyond the reach of aſſiſtance; as we want no deſcription from either of their feelings, to aſſiſt our judgment by, but we trace the ſymptoms of each to its cauſe, and re-eſtabliſh Nature in her regularity and laws.

I flatter myſelf it now appears that every ſpecies of internal and external medical application is not only foreign, but diametrically oppoſite to our mode of practice; and that all evacuations produced by mechanical means are injudicious, and deſtructive to the conſtitution.

Let it be an invariable Rule, not to deſtroy the patient's general ſtrength, but to ſupport him by proper food and nutritious fluids; by which means each viſcus will freely ſecrete its own fluids, and the ſyſtem in general will perform its proper functions.

I obſerved in the courſe of our converſations, that conſiderable aſſiſtance is derived to thoſe eſpecially, who are not accuſtomed to the means of treating patients, from tracing their intentions by the motion of their hands or fingers: but I hope you now know, that thoſe motions are no otherwiſe eſſential; conſequently, the leſs violent we are in ſuch graceleſs attitudes, the leſs food we ſhall afford to incredulous jocularity. We ſhall as efficaciouſly treat the patient with our eyes ſhut, and our hands either in our hats or in our pockets, or, in ſhort, in any other poſition, as if we waved our hands from the patient's knees to his head. All this depends on habit, which every one may by a little exertion mould to his own choice.

Here we cloſe the preſent Curative Inſtructions; in which you perceive that all received theories of Diſeaſe are totally overturned; Symptoms, Pulſe, and all the deemed unerring Rules are rejected, and the entire voluminous Materia Medica reſcued from the torture of alteration and improvement. We have, in ſhort, eſtabliſhed a permanent Peace with the entire animal, vegetable, and mineral kingdoms, and reduced the medical library to a very ſmall compaſs.

Thrice happy the Man, who, his taſk accompliſhed, ſhall receive the laſt Eternal Benediction, ceaſe to emanate, and reſign, unatmoſphered, his uſeleſs houſe of Particles.

LECTURE VI.

LECTURE VI.

WE come now to conſider and account for ſome of the phenomena which take place during our Curative Treatment.

When explaining the general influence which all human Beings may, even at random, or without ſyſtem of any kind, exert over the nerves of delicate, and frequently over thoſe of diſeaſed ſubjects, I obſerved, that ſuch influence frequently became ſtrongly marked with ſpaſms; at other times, by partial or general convulſions; and not unfrequently by Coma.

The Ancients took notice of this influence, but, unable to diſcover the cauſe which produced it, were led to attribute the phenomenon to a property in the atmoſphere, ſimilar to that which cauſes iron to attract its ſimilar.

Meſmer adopted this idea from Kircher, Fludd, and other Authors, and called thoſe marked effects, Criſes. Some of his followers, with as little diſcernment as judgment, ſtiled another ſtage of this nervous affection, Somnambuliſm, or, Walking in Sleep.

Thoſe who are not yet familiarized to this ſubject, ſurprized at the artificial or accidental production of Coma, conclude the perſon in that ſtate to be removed beyond nature, and call Coma, a Criſis or ſupernatural exaltation, from which oracular anſwers are expected. This new food is graſped at with avidity by impoſtors, and many eyes are deſignedly cloſed to deceive the Aſſiſtant, and diſgrace the Science.

Hence it is not uncommon to hear people talk of Criſes as familiarly as if they actually knew ſomething of the matter, and entertain their acquaintances with the wonders of their laſt Comatoſe dream.

A moſt ſcientific laſs, wiſhing me to believe ſhe ſaw my brain; as a proof of her perſpicuity, reſembled it to an oyſter. And a medical gentleman in

that ſtate conceived the inſide of an old rheumatic patient to look like a mutton-pie.

The critical effects which come immediately under our curative cognizance, are the ſeveral evacuations and efforts ſet up to diſlodge and throw off offending matter.

Theſe announce themſelves under one or more of the following appearances:

Coldneſs,	Sighing,	Convulſion,
Heat,	Eructation,	Expectoration,
Shaking,	Laughing,	Vomiting,
Gaping,	Crying,	Purging,
Sneezing,	Spaſm,	or

Evacuations from the kidneys or pores, which taking place with our intention during Treatment, may be conſidered as critical effects produced by our efforts.

Theſe effects may, at other times, take place independently of our intentions, and are undoubtedly critical and ſalutary exertions of Nature ſet up to cure herſelf. Thus, Nature in one caſe ſets up her own critical efforts to puſh off obſtruction; and in the

other, we imitate her own proceſſes, and help her on to cure, when ſhe is become inadequate to the taſk.

It is highly probable that, had mankind continued to live in the original ſtate of nature, unpampered with ſuperfluous cloathing, improper food, warm rooms, fermented liquors, contaminated atmoſphere, and medical evacuations, the conſtitution would have continued ſo vigorous as in general to free itſelf from every derangement; or, at leaſt, to ſtand in need of very little, of even this original and natural mode of aſſiſtance, until, at a very advanced age, ſome part of the body, like the wheels of a time-piece, became regularly rubbed out, and action completely ſtopped.

Amongſt the effects which I have enumerated, are to be placed thoſe of Coma and of Sleep.

Coma is ſimple or compound, and reſembles that ſtupid inſenſibility, which frequently ariſes from injuries received in the head and brain.

Coma is Compound, when it is accompanied by any phyſical effects, or with ſleep.

But when it runs on, or is conducted through its different ſtages, and receives no interruption from any of thoſe efforts I mentioned, it is Simple.

The ſtate of Coma may be produced by us in all ſuch ſubjects as are ſuſceptible of it, by the exertion of ſpiritually-combined Attention, Intention, and Volition.

Suſceptibility of the ſtate of Coma depends on a peculiar organization; or rather, that ſtate is prevented by obſtruction of any of the neceſſary organs. By conſidering thoſe parts we ſhall more clearly comprehend the method of inducing that effect.

But allow me firſt to obſerve, that although it may be conſonant with my engagement to teach you the means of producing ſuch marked effects on your fellow creatures; yet wantonly to exert that power for the gratification of your own curioſity, or that of others, is not only culpable, but is frequently dangerous; and is ſo widely foreign to the intent of this Science, that I have reaſon to believe it may be puniſhed by, at leaſt, the total privation of all power in the frequent offender.

Scrophulous patients afford us a ſtriking example of the impropriety of producing Coma in them. A quantity of acrimonious matter is frequently depoſited either between the coats of the ſtomach, the diaphragm, pleura, or glands of the neck.

Judicioufly treated, this matter would be either externally evacuated, or conducted into the ſtomach, to paſs off by vomiting, or by the inteſtinal canal: but by the mode of Treatment which is regularly adapted to the production of the ſtate of Coma, you will ſoon perceive, that the matter formed in the nerves, between the head and ſtomach, or in the glands with which they are connected, may be carried up to the brain, where ſome of this poiſonous leaven will rarely fail of producing the moſt diſtreſſing and the moſt alarming ſymptoms, if Nature ſhould prove inadequate to the taſk of caſting it off, or if we neglect to remove it.

Beware then of gratifying a vanity which it is your duty to eradicate: and remember, that you are called on to cure, and not to prove your power, by trifling with a ſubject whoſe merit you will ſoon learn to appreciate.

How juſtly ſhould we hold a phyſician in contempt, who, in a mixed company, threw emetic tartar into the coffee-cups, to prove that he could produce vomiting; and yet, we overlook the impropriety of rendering a company ſtupid, as a proof that we can cure diſeaſes.

But although I thus condemn the wanton and unneceſſary production of Coma, yet I wiſh it to be underſtood, that there are ſome caſes in which it is not only ſafe but judicious, to encourage and to purſue ſuch marked effects when they involuntarily announce themſelves. Hence we are to conſider the means of inducing and increaſing them, as the nature of the caſe may occaſionally demand.

The ſtate of Coma is cauſed by a preſſure on that part of the brain which is ſituated under the coronal ſuture, in the front of the head, and forwards over the forehead to the root of the noſe.

This preſſure is to be produced by particles of air and by particles of fluid, for which application muſt be made to the nerves.

It is neceſſary to premiſe, that the nerves contain a fluid, and that that fluid obſerves a certain mode of circulation.

That all nerves are porous in every direction, and that particles of general atmoſphere are continually paſſing through them.

And that the nerves are capable of diſtention and contraction.

The nerves to which I now allude, and which conſtitute the object of our preſent attention, form a plexus or kind of network, by croſſing each other innumerably, in the pit of the ſtomach, and thence are continued upwards, as ſeparate threads or ſtrings from the centre to the ends or orifices of the ſtomach, named Cardia and Pylorus..

Arrived at theſe orifices, they turn upwards, and paſs through the diaphragm, and run in the lining of the cheſt, called Pleura, towards the head.

When they arrive at the neck, they ſeparate to each ſide, and ſome of them get into the ſkull, creep up between two membranes which cover the brain,

called Dura and Pia Mater, and make their way to a ſpace, or well, which is ſituated in the brain, in the top of the head, immediately under the ſoft part in the infant ſkull, and known by the title of Fontanella, Opening, or Mould.

The remainder of thoſe nerves which do not get into the ſkull, creep up on the outſide of the face, run before and behind the ears and over the temples; ſome of them meet between the eyes at the root of the noſe, and terminate there: but others make their way through holes in the ſkull, and run on to the well, to join thoſe which paſſed in at the neck.

Thus we perceive, that an immenſe number of nerves connect this part of the brain with the coats and cavity of the ſtomach: that theſe nerves are open at one end in the well in the brain, and at other ends in the cavity of the ſtomach and between its coats.

Theſe nerves have ſeveral departments or occupations; but thoſe which come within the cognizance of the preſent part of our ſubject are of two kinds. The firſt ſet receive a fluid, which is ſeparated from

the circulating blood in the coats of the ſtomach, convey it up, and depoſit it in the ſpace or well in the brain: and the ſecond ſet abſorb a fluid which is as regularly and continually ſecreting from the fluids in the brain, and depoſited in the well; they bring down a part of this fluid and depoſit it in the cavity of the ſtomach for evacuation.

It is neceſſary to recollect that all Nerves are capable of being affected in their ſubſtance.

That the Fluid, paſſing from the brain to the ſtomach, may be ſtopped in its paſſage, and accumulated in the well.

That the quantity of the Fluid which is deſtined to run from the ſtomach to the well, may be encreaſed, and that wind, or particles of air, which are continually contained in the ſtomach, and between its coats, may be conducted up to the ſame reſervoir.

When theſe Fluids are accumulated in the well, they form a preſſure on that part of the brain. If that preſſure is encreaſed, and continued for a ſhort time by perſevering in the ſame proceſs which produced it, a ſtate of ſtupor takes place, in which the

eye-lids fall, and the perſon becomes inattentive to general occurrences, and that ſtate takes the name of Comatoſe.

The nerves, which are thus employed for the conveyance of certain quantities of air and fluids, to and from the brain, are exceedingly minute and numerous. They are ſituated between, and encompaſſed by, Muſcles, Membranes, and other Subſtances, all which are ſubject to inflammation and derangement. Hence thoſe nerves are frequently obſtructed, and ſometimes totally deſtroyed.

If ſeveral of them ſhould by natural malconformation, or by accident, become obſtructed, the quantity of wind, and of nervous fluid carried up by our efforts to the brain, will be inſufficient to induce the neceſſary preſſure, conſequently that perſon will not be ſuſceptible of Coma.

Thus it appears that the aptitude to that ſtate muſt be according to the perſon's habitual health or conformation of thoſe parts. If the defect be a natural one, all our exertions will prove unavailing; but if

the obſtruction be accidental, we may expect to remove it by longer or ſhorter perſeverance in the neceſſary attention, according to its degree and to the time of its exiſtence.

This accounts for ſome ſubjects falling into the ſtate of Coma at the firſt Treatment; why ſome begin to ſhew an aptitude to it after ſeveral repeated efforts; and explains the cauſe of others' requiring perhaps a year or longer, of conſtant and daily Treatment, to remove the obſtructions, and to allow the fluids a free paſſage to the Brain.

If the nerves are free and unobſtructed, the perſon may be conſidered as adapted to the ſtate of Coma; but ſtill, much will depend on the Aſſiſtant's judicious mode of conducting the fluid. If through impatience or imprudence, he ſhould violently ſtrike his emanations againſt thoſe delicate nerves, Spaſm, or Convulſion will ariſe, but not Coma, becauſe the irritated nerves curl up and effectually prevent the paſſage of the fluid to the Brain.

It is therefore neceſſary to be obſerved, that the

fluids are to be conducted upwards, ſlowly, ſoftly, and gently, with the greateſt care, caution, and delicacy, maintaining the ground as it is gained.

Three objects are to be kept in view: one, to carry up the fluids from the ſtomach to the brain; another, to prevent the deſcent of fluid from the brain; and a third, to render the nerves themſelves gently tight, but without curling: and the whole muſt be conducted as if you were ſtealing up, little by little, the neceſſary fluids on the brain, until the effect announces itſelf.

The operation is to commence at the pit of the ſtomach, and the firſt intention muſt be to ſeparate the plexus, or heap of nerves, ſituated in that part, and then to follow their courſe at each ſide to Cardia and Pylorus.

The nerves muſt then be purſued, through the diaphragm up the pleura, and into the ſkull to the Brain.

When arrived at the coronal ſuture, the wind

muſt be brought forwards, and the Dura Mater, muſt at the ſame time be rendered tight, preſſing and contracting into a ſmall compaſs the fluids, air, and nerves, and bringing them to one point over the noſe, then giving the membranes and nerves a kind of twiſt, and hooking or rather entangling the whole on a ſmall bony proceſs, called Cryſta Galli.

I do not mean by this deſcription to ſay, that the brain is literally flayed of its Pia Mater; but that, by rendering that thin membrane exceedingly tight, the nerves may be compreſſed, and a conſiderable quantity of their fluid, together with a thick humor, continually ſecreted from the brain, may be forced down towards the root of the noſe, and entangled round the Cryſta Galli.

By clearly comprehending this proceſs, we are no longer at a loſs to account for the frequent occurrence of the ſtate of Coma by the curative mode of Treatment for the ſtomach, independently of any view to Coma: for the action directed to the cavity and internal coat of the ſtomach, muſt ſtimulate it to ſome degree of contraction, and that contraction muſt com-

preſs the nerves contained in its ſubſtance, their fluid muſt be forced upwards, the deſcending fluid muſt be ſtopped and gradually accumulated in the brain, and, of courſe, a conſiderable degree of preſſure muſt be formed on it: if the number of healthy nerves be ſufficiently great, and the proceſs perſevered in for ſome time, the collected fluid muſt induce ſtupor, and Coma muſt come on.

The ſtate of Coma thus unintentionally produced, may be ſafely cheriſhed and encouraged, becauſe it indicates a healthy ſtate of that part of the nervous ſyſtem. During its continuance, the Coma removes general irritability, and, in ſome ſlight caſes, will frequently prove ſufficient to remove the cauſe of ſeveral diſtreſſing ſymptoms, or conſiderably decreaſe obſtructions, dependant in great meaſure, on that particular ſtate of the nerves. In the preſent inſtance, the effects of Coma may be conſidered to reſemble thoſe of opium, and other narcotics, with this eſſential advantage, that it removes irritability without injuring the ſyſtem; whereas narcotics of every kind, diſeaſe the ſtomach, and inſenſibly deſtroy the conſtitution.

Coma, once produced, requires little or no attention: it continues for ſome time, then gradually decreaſes, and ſoon entirely diſappears: a little heavineſs may remain for a few minutes, which then goes off entirely.

If the nature of the caſe ſhould require it, the Aſſiſtant has it in his power immediately to remove every veſtige of it, only by bringing down from the head the remainder of the fluid which he had carried up, and relaxing the tightened nerves: it is however, in general, more prudent to leave it to its own courſe undiſturbed.

It ſhould be cautiouſly obſerved, that partially removing the effect, will frequently ſubject the Practitioner to diſgrace. Stupor and head-ache may at the inſtant ſeem to be totally removed, and yet, when the nerves recover their ſenſibility, may be ſeverely felt by the patient during the abſence of the Aſſiſtant, and naturally imputed to the ignorance of the Practitioner, or imperfection of the Science. It ſhould therefore be an invariable rule, never to quit ſight of ſuch patients before the effects have perfectly terminated.

Thus far we have taken a view of Coma in its ſimple ſtate: we are next to conſider it more extenſively.

Coma may be complicated with Sleep; that is, the perſon may be in a Comatoſe ſtate, and aſleep at the ſame time.

To comprehend this, it is neceſſary to underſtand that all the nerves in the body are ſo wonderfully and ſo wiſely connected with each other, that an impulſe carried on any one of them will be propagated to the entire nervous ſyſtem. Hence, thoſe nerves which muſt be affected to induce Coma, being intimately connected, in their paſſage from the ſtomach to the head, with thoſe of Sleep; the ſtate of Sleep muſt come on with that of Coma, provided the nerves of Sleep receive a ſufficient impreſſion.

If the nerves of Sleep ſhould be more delicate, more pervious, or more healthy, than thoſe of Coma, Sleep will come on before Coma.

If the nerves of Coma, as well as thoſe of Sleep, are

delicate, healthy and unobſtructed, both ſtates of Coma and of Sleep may come on at the ſame time.

If the nerves of Sleep are dull of ſenſibility, or ſhould be obſtructed, Coma only will be induced, without Sleep.

If the ſtate of Sleep only ſhould be produced by Treatment, the benefit accruing from it will be trivial.

If the production ſhould be a mixture of Coma and of Sleep, the laſt will become an impediment to the advancement of the Comatoſe ſtate.

If the Coma ſhould be pure, it may admit of improvement.

In all ſuch ſtates of apparent ſtupor, it is deſirable and ſometimes material to aſcertain whether it be pure or not, which, by attending to the following rule, we have within our power.

It is neceſſary to obſerve, that ſome of the nerves which run up from the ſtomach over the face and

temples, and creep through the ſkull about the noſe and eyes, muſt be healthy and pervious; and that a certain degree of preſſure ſhould be induced on thoſe nerves, and thence on the brain, to contribute to the production of the ſtate of Coma.

When the patient falls back with cloſed eyes and apparent inſenſibility, if a ſlight degree of preſſure is made on the nerves over the noſe, ſhould the ſtate be that of Sleep only, the patient will immediately awake.

If it ſhould be a mixture of Sleep and Coma, this preſſure will remove Sleep, and Coma will continue.

If it ſhould be a pure and unmixed Coma, it will, by this gentle preſſure, become confirmed, or more perfect.

This preſſure may be made by delicate gentle contact, placing the finger and thumb on each ſide of the root of the noſe; or it may, by proper exertion, and perhaps with greater propriety, be effected in the ſame manner without contact.

This criterion to judge of the nature of each

occurring ſtate of ſtupor, is valuable, and well worthy a place in the memory of thoſe who have the Science at heart.

Thoſe who are in the habit of treating patients, ſhould be aware that the ſtate of Coma, though quiet and tranquil at its commencement, will ſometimes become diſturbed and troubleſome by ſudden ſpaſms or ſevere convulſions. Experience and reflection in ſuch caſes are eſſentially neceſſary for the Aſſiſtant's ſupport, and for the relief of the patient, as confuſion would render him incapable of purſuing the proper mode of Treatment.

Thoſe ſpaſms or convulſions are occaſioned by ſome ſudden effect carried on the nerves; unexpected noiſe, and ſometimes muſic will produce them; and in other ſubjects muſic will induce a contrary effect, by calming ſuch nerves as are already in a ſtate of irritation: this however depends on the healthy or diſeaſed ſtate of ſome particular nerves, and is foreign to the ſubject of our preſent conſideration.

But the moſt general cauſe for ſpaſms and convul-

ſions, during the ſtate of Coma, is, the detachment of diſeaſed particles, which being thrown off by the exertion of Nature, acting vigorouſly to free herſelf from the derangement during this period of quiet, ſtrike againſt, or perhaps ſtick in, ſome tender or diſeaſed nerve in their paſſage; the muſcles and limbs, to which the injured nerve belongs, ſuddenly contract, the effect is propagated to other parts of the body, and the convulſive contortions become general.

The cool, unalarmed, and experienced Practitioner recollects, that the cure and removal of this derangement is completely within his power, by ſeeking the cauſe and laying ſmooth the contorted nerves, without diſturbing the Coma: but if the troubleſome effects frequently recur, by taking off the Coma, the whole train of ſymptoms immediately ſubſide.

Thus we perceive, that the ſtate of Coma, when indicated by Nature during curative Treatment, and judiciouſly purſued, proves ſalutary; but wantonly produced, it is not only in itſelf a Diſeaſe, but may be followed by very dangerous conſequences; for

which reaſon, ſuch wanton production of Coma is neither ſafe nor allowable.

The appearances which announce the approach of Coma are not uniformly ſimilar in all, nor at all times in any one ſubject: ſome ſigh deeply as if greatly oppreſſed, and after gaping two or three times, the eyes become heavy, the upper lids fall, and are, by repeated exertions, pulled up again; the head and body appear tottering, as if unable to ſupport themſelves; at length, the eyelids cloſe, and the perſon falls inſenſibly backwards.

Others ſhudder a few times, become heavy and giddy, and, without any previous ſighing or gaping, appear, with open eyes, ſtupid and inſenſible: whilſt others, with ſcarcely any previous notice, fall ſuddenly, as if by a violent blow.

The ſtate of Coma is as uncertain in the length of its duration, even in the ſame ſubject at different times, as it has appeared to be in the ſymptoms of its approach. This will be more ſatisfactorily underſtood perhaps by examples:

One of our brethren in this Science, a medical man, who rarely required more than twenty minutes Treatment, to reduce him to the ſtate of Coma, after continuing inſenſible for about the ſpace of half an hour, ſometimes with, and at other times without, ſpaſmodic twitchings, generally opened his eyes with a wild ſtare; anſwered when ſpoken to; and thought himſelf ſo perfectly recovered as to be able to walk; but could take no more ſteps without falling than the Operator choſe to permit him, and then fell helpleſs on the carpet.

A lady who was very anxious to feel the effects of Treatment, after near three hours of unremitted attention, was at length thrown into a complete ſtate of Coma by one of our brethren. This long and violent exertion had eſtabliſhed ſo effectually the neceſſary preſſure on her nerves and brain, and produced in them ſo great an aptitude to the eſtabliſhed law, that for more than three weeks ſhe was never out of Coma, except when her brother and ſiſter, who were inſtructed in the Science, occaſionally decreaſed the effects. The lady was fond of muſic, and yet the firſt note ſhe heard on any inſtrument, ſo hurt her irritated nerves,

that it was found neceſſary to remove her to a part of the houſe where no ſuch ſounds could be heard. When thrown into the ſtate of Coma, the lady laboured under ſeveral obſtructions, all which gradually gave way, and ſhe at length awoke from her Coma in good health.

By theſe examples it appears, how powerfully the nerves and brain muſt be affected to induce the ſtate of Coma; conſequently, that though ſuch happy effects as thoſe in the laſt caſe, may ſome few times ariſe without being attended with bad conſequences; yet, that it is highly imprudent to run the riſk of inducing that ſtate, when Nature, or the neceſſity of the caſe does not require it.

The proceſs which I have deſcribed is the regular and general rule for producing the ſtate of Coma: by this proceſs you perceive that a certain degree of preſſure muſt be formed on the front of the brain; and as this preſſure may take place in the curative proceſs adapted to ſome parts of the body, Coma muſt of conſequence come on.

The Stomach affords us one example, and the Head gives us a ſecond. There occur many caſes of obſtructed Wind in the Scalp, membranes of the Brain, and of the Eyes, which require to be treated downwards towards the noſe or mouth; by which an incipient Coma will announce itſelf. The inexperienced, elate at this flattering appearance of marked effects, are tempted to change their mode of Treatment, and fly to the regular rules laid down for the production of Coma; and the conſequence generally is, that all their flattering appearances vaniſh, and leave the Aſſiſtant exceedingly mortified and diſappointed, which a few moments' reflection would have obviated. For, as the firſt proceſs which cauſed the preſſure was directed from the ſkull downwards towards the noſe, and brought wind on the brain, it is evident, that treating from the ſtomach upwards muſt puſh it off again, and therefore completely remove the preſſure which was about to induce Coma. To ſucceed then, it is clear that the proceſs which induced the ſymptoms ſhould be purſued, and not changed, until the Coma is complete: then the proceſs may be varied as the Aſſiſtant pleaſes.

This ſhort ſketch of the ſtate of Coma leads us to the termination of our preſent inſtructions, and will enable the anxious Practitioner to reduce ſo much of the Theory to immediate Practice.

The infant ſtate of almoſt all diſcoveries expoſes them to the ridicule of unbelievers; but this Science in particular, as it militates againſt the intereſts of ſo many individuals, lies open to every aſperſion which ſuch men can find pretext to load it with. To guard, therefore, as much as poſſible againſt ſuch aſperſions, I have formed for myſelf an invariable rule, never to treat any Female without the preſence of a third perſon. And I beg leave to recommend that rule to the obſervance of every brother, until a more general acceptance of the Science ſhall render ſuch precaution unneceſſary.

Permit me, before we part for the preſent, moſt ſtrongly to recommend to your attention the afflicted Poor.

Remember, that however humble their preſent ſtate, or circumſcribed their worldly wealth, they are our

fellow-creatures, children of the ſame Great Father, and equal candidates for immortal bliſs; that poverty, rightly uſed, will prove to them real riches.

Remember, that we are literally their Stewards, and muſt expect to be ſeverely puniſhed if we withhold the food, and permit our fellow travellers to want, ere yet the journey is accompliſhed.

We have now received for them another ſteward-ſhip; and it is our indiſpenſable duty to prove faithful to the truſt: that when the morrow of this mortal life comes on, and we arrive where rigid Juſtice is a ſtranger to Partiality, where Virtue only can purchaſe Mercy; where worldly honors appear to have been but gilded baits to lure the heedleſs to deſtruction: That then our undying Spirit, reſcued from its droſſy maſk, may riſe to joys eternal; that promiſed, that ſure Reward of a life well ſpent, ſincere Repentance, and real chriſtian Charity.

I Flatter myſelf you are now convinced, that this Science is of too exalted a nature to be trifled with or deſpiſed: and I fondly hope, that even the ſuperficial ſpecimen which you have thus far received, has given you room to ſuppoſe it not a human device, held out for the ſportive gratification of the idle moment, but a divine call from the Affectionate Creating Parent, inviting his rebellious children by every perſuaſive, by every tender motive, to renounce the deſtructive allurements of earthly influence, and to perform the duties which he ſent his Beloved Son into the world to inculcate, as the only and effectual conditions on which the deluded ſpirit in Man ſhould eſcape future puniſhment and enjoy eternal bliſs.

The Apoſtles received and accepted of thoſe terms; Diſciples out of number embraced the doctrine; and, by example, by diſcourſe, and by cures, influenced the minds of the unthinking multitude, abſorbed in ſin and rioting in obſtinate diſobedience.

Again, the Almighty Father deigns to rouſe his children from that indifference to their impending fate, into which the watchful Enemy omits no opportunity of enticing them.

To lead our Saviour from his duty, the Tempter ſhewed and offered him all this world's grandeur; ſo he daily, in ſome degree, does to us. Our Saviour ſpurned him with contempt, and ſo muſt we.

Our bleſſed Saviour, whoſe Spirit was a ſtranger to ſin, cured by perfect Spiritual and Phyſical Innocence, and by an uninterrupted dependance on his Great Omnipotent Spiritual Father. He never failed.

His choſen Apoſtles cured by relinquiſhing this world and following Him. We have but one example, that I can recollect, of their having failed; and then Chriſt told them what was neceſſary to enſure ſucceſs.

The Diſciples and the Followers of the apoſtles performed many cures; but how far they were chequered by failures I am not informed.

Paracelſus, Sir Kenelm Digby, Sir Robert Fludd, and ſeveral others, experienced ſufficient power in themſelves to verify the words of our Saviour; but were ſoon deprived of what was only lent, to urge them to ſeek for the Great Original Cauſe. "Verily, verily," ſaid Chriſt, "the works which I do, ſhall ye do alſo; and greater works than theſe ſhall ye do; for I go unto my Father."

Valentine Greatrakes, by obeying the inſtructions imparted to him by viſions, performed many cures; but ceaſing to look up to the Source, and giving way to medical importunity, he adminiſtered drugs, and could not expect ſucceſs.

Gaſner, a moral and religious man, performed many cures; he was ſhut up in a convent through the ignorance of his ſuperiors, and the ſuperſtitious blindneſs of the age he lived in; thence his progreſs was trivial, though his dawnings ſeemed to promiſe much.

Meſmer pillaged the ſubject from Sir Robert Fludd, and found to a certainty the exiſtence of the power;

undiſpoſed to attend to our Saviour's information, he preferred loadſtones and magnetic ideas to the ſervice of the Great Author, and after performing ſeveral accidental cures, his magnetiſm and his errors ſhared the fate of his predeceſſors.

Doctor D'Eſlon, his partner, though a man of ſtrong reaſon and impartiality, aſcribed the power which he experienced to the *phyſical will of man;* and after performing ſome cures he fell aſleep.

At length, after ſo many centuries of ignorance, it has graciouſly pleaſed the Almighty Father to draw aſide the veil, and diſcloſe his ſacred myſteries to this favoured generation. And when I ſhall be called home, it will, I hope, appear that, for a bright and happy certainty of ſerving my God and living with my Saviour, I pointed out to you, my Brethren, the Almighty's real Science, and that path to heaven, which Chriſt, the only perfect and ſucceſsful one of this liſt, left to mankind as his laſt teſtament and ineſtimable dying gift.

But let us not overlook his words: "Take the

beam from your own eye, before you attempt to remove the mote from the eye of your brother:" or, in other words, Succeſsfully to cure your brother's body, you muſt firſt learn to cure your own ſoul.

Let us ſet out with this proſpect; and we may reſt aſſured that the Ear of Heaven is as open to our petitions, as the Eye of the Almighty is to the ſincerity of our heart. Here we ſhall find the *grand arcanum*, the ſteady *point d'appui*, the *philoſopher's ſtone*, and the *omnia in uno*, by which we ſhall ſtand like rocks, unſhaken through life's tempeſtuous ocean.

If we compare the inſtructions we have received with the preſent ſtate of worldly man, we ſhall be ſhocked at the difference, and terrified at the ſituation of thoſe who have not ſufficient reſolution to tear aſunder the chains which ſhackle them to deſtruction.

Our Saviour inculcated Humility, but the world holds up oſtentation, pride, and ideal conſequence.

Reſignation and paſſive obedience to the Will of

God, is the law of our Great Maſter;—but Man ſets up revenge, honor, and all its rueful train of murders.

Our Saviour ſaid "Watch and pray always, for ye know not the hour when the Spirit of the Almighty ſhall convey your ſoul to judgment:" but Man ſays, "My granaries are full, and my fortune is large; ſoul, be at peace; for I will riot and be merry."

Our Saviour ſays, "When you are going to pray, if you have anger or animoſity to your neighbour, go firſt and be reconciled to him, and then come and offer up your gift of devotion; nay, permit not even one revolution of the ſun to go down on your reſentment, leſt you ſhould be called away to judgment in that unforgiving ſtate, and become condemned to puniſhment:" but Pride, that enemy to our ſalvation, ſays, Support your conſequence, and deſpiſe the delinquent until he has ſufficiently atoned for his fault.

Thus, heedleſs man is continually led away from rectitude, until death ſtares him in the face, and

conviction, like a thunder-bolt, ruſhes on the unprepared ſpirit and blackens all its proſpects.

If the ways of the thoughtleſs and wicked were deſtructive to themſelves only, the evil would be ſingle; but alas! every individual, according to the place he holds in life, is more or leſs looked up to for imitation.

The ſingle man, though unencumbered with a family, influences by his example his companions and dependants; whilſt the parent's example is anxiouſly looked up to by his admiring offspring. Thus, both ſtates become rigidly reſponſible for the effects which they produce on their fellow creatures by their language or example: but what words can paint the future agonizing ſenſations of that parent, whoſe crimes or imprudencies may have led his offspring into torment.

Thus led into pungent conviction, thus called to the execution of our duty; thus graciouſly employed, and continually watched by the all-ſeeing Eye of our Omnipotent Creator; let us pray that we may be

enabled to tear away every unwarrantable paſſion; let us trample on the Deluder and ſpurn at his temptations; let us, in full and Chriſtian forgiveneſs, grapple to our ſouls with bonds of brotherly affection, thoſe who may have offended us, even ſeventy times ſeven, and pave the way for that glorious flight, on the verge of which we are this very inſtant ſtanding, where never-fading joys await our happy arrival.

This is the purport of our Science; this is the ſecret which will lead us to perfection; this is the method of opening the eyes of the blind; this is the rule to work miracles by: and this is the road to ſalvation, which our Saviour conciſely delivered in the Twelfth Chapter of St. Mark, in theſe words:

" The firſt of all the Commandments is,

" Hear, O Iſrael: the Lord our God is One Lord; and thou ſhalt love the Lord thy God with all thy heart, and with all thy ſoul, and with all thy mind, and with all thy ſtrength, and Him only ſhalt thou ſerve.

" This is the firſt Commandment; and the ſecond is like; namely, this:

" Thou ſhalt love thy neighbour as thyſelf.

" There is none other commandment greater than theſe."



END OF PART I.

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